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Philosophers Speak for Themselves

Berkeley, Hume, and Kant

Edited by

T. V. SMITH

AND

MARJORIE GRENE



Phoenix Books

THE UNIVERSITY OF CHICAGO PRESS

CHICAGO & LONDON

This book, together with
FROM DESCARTES TO LOCKE (Phoenix Book P17)
is also available from the University of Chicago Press
in a one-volume, clothbound edition entitled

FROM DESCARTES TO KANT

B
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S54
1957

Library of Congress Catalog Card Number: 57-7905

THE UNIVERSITY OF CHICAGO PRESS, CHICAGO & LONDON
The University of Toronto Press, Toronto 5, Canada

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PREFACE

THIS book—together with its companion volume, *From Descartes to Locke*—is intended to furnish guides and readings in the philosophy of the seventeenth and eighteenth centuries. Wherever possible, whole works have been chosen; but where, as in the case of Locke's *Essay* or Hume's *Treatise*, that plan was obviously not feasible, fairly substantial selections have been substituted. The limited scope of the volumes unfortunately does not permit the inclusion of readings bearing on all aspects of the philosophy of each major author. Fundamental problems of method and of metaphysics have been treated in each case; ethical problems appear in the selections from Hobbes, Hume, and Kant, and the philosophy of civil society in the parallel passages from Hobbes and Locke. In the case of the remaining authors, the introductions attempt to suggest briefly how these gaps are filled, although their chief aim is to elucidate for the student the selections actually included.

The lists of suggested readings make no claim to completeness but enumerate, for students interested in reading further, some of the books that are easily available in English. Since the first appearance of the materials in this book, a number of useful and important works have come to our attention that ought to be added to these lists. Chief among these are the following: E. C. Mossner, *The Life of David Hume* (Austin, Tex., 1954); S. Korner, *Kant* (Penguin ed. [London, 1955]); A. D. Lindsay, *Kant* (Oxford, 1934); G. Martin, *Kant's Metaphysics and Theory of Science* (Manchester, England, 1955); and H. J. Paton, *The Categorical Imperative: A Study in Kant's Moral Philosophy* (Chicago, 1948).

Acknowledgment is made to the Open Court Publishing Company for the translation of Kant's *Prolegomena*.

T. V. SMITH
MARJORIE GRENE



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CHAPTER I

GEORGE BERKELEY

Berkeley was born in 1685 in County Kilkenny, Ireland, and educated at Kilkenny School and at Trinity College, Dublin. He became Fellow of Trinity in 1707 and remained in residence there until 1713, when he left for London with the manuscript of his third important philosophical work under his arm. (*The New Theory of Vision* had appeared in 1709, and the *Principles of Human Knowledge*, Part I, in 1710.) In the next years (until 1720) Berkeley traveled extensively on the Continent, first as secretary to the ambassador to Sicily, then as companion to Bishop Ashe's son. During most of the next decade his efforts were directed toward the foundation of a university in the Bermudas. In 1729 he actually arrived in Rhode Island to begin the execution of his plan, whereby education in "Christian religion, practical mathematics, and other liberal arts and sciences" was to be provided for young colonials and for "a number of young American savages" as well. When the funds he had hoped for were diverted, Berkeley returned, in 1731, to London, where he lived until 1734. For the next eighteen years he resided in Ireland as bishop of Cloyne, taking great interest in the welfare of his flock and in later years attempting with special zeal to teach them the use of tar water as a specific for numerous ills. In 1752 he moved to Oxford, where he died quietly one day (in January, 1753) while his wife was reading to him from the fifteenth chapter of Corinthians I. Chief works: *Commonplace Book* (1705-8 [published 1871]); *An Essay towards a New Theory of Vision* (1709); *A Treatise concerning the Principles of Understanding*, Part I (1710; 2d ed., 1734); *Passive Obedience* (1712); *Three Dialogues between Hylas and Philonous* (1713); *De motu* (1721); *An Essay towards Preventing the Ruin of Great Britain* (1721); *Alciphron, or the Minute Philosopher* (1732); *The Theory of Vision . . . Vindicated and Explained* (1733); *The Analyst* (1734); *A Defence of Free Thinking in Mathematics* (1735); *The Querist* (1735, 1736, 1737); *Siris* (1744) (this title first given in the edition of 1746). Suggested readings: *Works*, ed. Fraser (Oxford, 1871, 1901). A. C. Fraser, *Berkeley* (Edinburgh and London, 1881, 1890); *Life and Letters* (Oxford, 1871); G. A. Johnston, *The Development of Berkeley's Thought* (London, 1923); A. A. Luce, *Berkeley and Malebranche* (Oxford, 1934); J. S. Mill, *Three Essays on Religion* (New York, 1884 [includes an essay on "Berkeley's Life and Writings"]); B. Rand, *Berkeley's American Sojourn* (Cambridge, Mass., 1932); John Wild, *George Berkeley* (Cambridge, Mass., 1936).

THE title-page of Berkeley's *Alciphron, or the Minute Philosopher* (1732) describes the work as "Containing an Apology for the Christian Religion, against those who are called Freethinkers." That description fits equally well the purpose of Berkeley's other writings. His interest is primarily theological, his aim to demonstrate the spiritual nature of the world and the divinity of its author.

His attitude toward the mechanistic explanations of physics is summarized in accord with that dominant interest, for example, in one of his later works entitled *Siris: A Chain of Philosophical Reflexions and Inquiries concerning the Virtues of Tar-Water and Divers Other Subjects Connected Together and Arising from One Another* (1744):

It passeth with many, I know not how, that mechanical principles give a clear solution of the phaenomena. . . . [But] all phaenomena are, to speak truly, appearances in the soul or mind; and it hath never been explained, nor can it be explained, how external bodies, figures, and motions, should produce an appearance in the mind. These principles, therefore, do not solve, if by solving is meant assigning the real, either efficient or final cause of appearances, but only reduce them to general rules.

Such general rules, however—that is, the regular sequences we observe in nature—are but signs composing a divine language whereby God guides his creatures.¹ So

the order and course of things, and the experiments we daily make, shew there is a Mind that governs and actuates this mundane system, as the proper real agent and cause. . . . We have no proof, either from experiment or reason, of any other Agent, or efficient cause, than Mind or Spirit. When, therefore, we speak of corporeal causes, this is to be understood in a different, subordinate, and improper sense.

Keeping in mind this fundamental theme, we may examine some of the principles set down in Berkeley's early epistemological writings: the *New Theory of Vision* (1709), the *Treatise concerning the Principles of Understanding* (1710), and the *Three Dialogues between Hylas and Philonous* (1713).

Locke had conceived ideas as any content of the mind from a sensation of a patch of red to the idea of humanity or triangle or God. Such ideas as the latter he conceives to be general or abstract ideas, generated by the intervention of language. We associate together certain simple ideas by using a word to stand for any one of them; but immediately associated with that word is not one particular one of the simple ideas for which it may stand but a "general idea," standing, like the word, for any one of the particular ideas,

¹ See *Alciphron*, Dialogue IV.

or for what all of them have in common. Thus the word "dog" becomes associated not just with every particular dog we meet but with a concept of dog in general that is neither white nor black, terrier nor collie, but only canine. Now to Berkeley this supposed abstraction involved in the use of language seemed impossible and the pretense to it fatally confusing. Locke, in his general ideas, had retained a vestige of the notion of mind as active and of ideas as its activities. But Berkeley, taking seriously Locke's use of "idea" to denote passive mental content, thought of ideas solely as images, and as such he proved emphatically that they must be particular. For surely an image must have particularity: a mental picture of a dog, for instance, must have some particular color, shape, size, etc. And it is for a number of such particular ideas, according to Berkeley, that general words may be said to stand; general ideas there are none.

Taking ideas, then, as particular, wholly passive objects of perception or imagination, Berkeley asks, not Locke's question, "Where do they come from?" but the question, "What are they in?" Ideas, fleeting perceptions that they are, certainly are not self-existent substances. But according to the substance metaphysics which Locke and Berkeley still follow, everything must be either a substance or an accident of a substance. According to Locke, the qualities of bodies were in the bodies, yet as perceived they must be modifications of mind. It never seemed to trouble Locke that shape, size, etc., though "in" mind in their character of sensations should be "in" matter in their character of primary qualities. Berkeley is more rigorous. If ideas are perceptions, if they are *in* mind at all, then they must be fundamentally mental and not material. For how could something which is a quality of perceiving substance—as our ideas certainly are—be at the same time a quality of a substance so utterly different from anything perceiving as "matter" is said to be? The whole hypothesis of a material, unperceiving substrate for our ideas—which are perceptions—is contra-

dictory. There are in fact only passive ideas and the actively perceiving substances or spirits which contain them. Locke had said, in his second letter to Stillingfleet: I have a perception of sweetness, redness, and roundness; but I must assume a *je ne sais quoi*, the substance of the cherry, which supports these qualities. Berkeley answers, no; take away the sweetness, redness, roundness, and you take away the cherry. The cherry *is* only the sum of my ideas of sweetness, redness, etc.; subtract those ideas and you subtract the thing itself.

There arises, of course, the question of the existence of "things" when a particular spirit is not perceiving them. Common sense refuses to give up the notion that there is a world existing independently of our perceptions of it. Berkeley answers very readily that ideas are contained in the mind of God as well as in finite minds; that it is in his mind that the "things" I perceive exist when I do not perceive them. Our whole knowledge of nature, in fact, is but a knowledge of God's orderly arrangement of ideas, whereby he has enabled us from the occurrence of one idea to predict the future occurrence of another. If I say, for example, that rain makes the grass grow, that means simply this: God has arranged the ideas of rain and of grass in such a way that whenever I have the idea of rain I may expect an idea of growing grass to follow. Berkeley set down a significant example of this principle in his *New Theory of Vision*, where he demonstrated that we do not perceive distance but only infer certain perceptions of touch from other perceptions of sight.

We have, then, a world of active spirits whose qualities are the passive ideas of which our knowledge consists. But if our ideas are passive, how do we know spirits? We can surely have no mental picture of those thinking and willing entities. Here Berkeley resorts to a new device. We have, he says, no idea of our own spirits or of God, but we do have a "notion" of them, that is, apparently some kind of active acquaintance with them different from knowledge by ideas.

In this way we can know God and our own minds even though it is impossible to have "ideas" of them.²

THREE DIALOGUES BETWEEN HYLAS AND PHILONOUS

THE DESIGN OF WHICH IS PLAINLY TO DEMONSTRATE THE REALITY AND PERFECTION OF HUMAN KNOWLEDGE, THE INCORPOREAL NATURE OF THE SOUL, AND THE IMMEDIATE PROVIDENCE OF A DEITY: IN OPPOSITION TO SCEPTICS AND ATHEISTS. ALSO TO OPEN A METHOD FOR RENDERING THE SCIENCES MORE EASY, USEFUL, AND COMPENDIOUS³

THE FIRST DIALOGUE

Philonous. Good morrow, *Hylas*: I did not expect to find you abroad so early.

Hyl. It is indeed something unusual; but my thoughts were so taken up with a subject I was discoursing of last night, that finding I could not sleep, I resolved to rise and take a turn in the garden.

Phil. It happened well, to let you see what innocent and agreeable pleasures you lose every morning. Can there be a pleasanter time of the day, or a more delightful season of the year? That purple sky, these wild but sweet notes of birds, the fragrant bloom upon the trees and flowers, the gentle influence of the rising sun, these and a thousand nameless beauties of nature inspire the soul with secret transports; its faculties too being at this time fresh and lively, are fit for these meditations, which the solitude of a garden and tranquillity of the morning naturally dispose us to. But I am afraid I interrupt your thoughts: for you seemed very intent on something.

Hyl. It is true, I was, and shall be obliged to you if you will permit me to go on in the same vein; not that I would by any means deprive myself of your company, for my thoughts always flow more easily in conversation with a friend, than when I am alone: but my request is, that you would suffer me to impart my reflexions to you.

² In the second edition of his *Principles* Berkeley adds another kind of notional knowledge—that of relations.

³ The text followed here is that of the second edition (London, 1725), which is substantially the same as that of the first edition of 1713. Changes in the edition of 1734 are indicated in the footnotes. The text has been modified only in the matter of capitalization.

Phil. With all my heart, it is what I should have requested myself if you had not prevented me.

Hyl. I was considering the old fate of those men who have in all ages, through an affectation of being distinguished from the vulgar, or some unaccountable turn of thought, pretended either to believe nothing at all, or to believe the most extravagant things in the world. This however might be borne, if their paradoxes and scepticism did not draw after them some consequences of general disadvantage to mankind. But the mischief lieth here; that when men of less leisure see them who are supposed to have spent their whole time in the pursuits of knowledge professing an entire ignorance of all things, or advancing such notions as are repugnant to plain and commonly received principles, they will be tempted to entertain suspicions concerning the most important truths which they had hitherto held sacred and unquestionable.

Phil. I intirely agree with you, as to the ill tendency of the affected doubts of some philosophers, and fantastical conceits of others. I am even so far gone of late in this way of thinking, that I have quitted several of the sublime notions I had got in their schools for vulgar opinions. And I give it you on my word, since this revolt from metaphysical notions, to the plain dictates of nature and common sense, I find my understanding strangely enlightened, so that I can now easily comprehend a great many things which before were all mystery and riddle.

Hyl. I am glad to find there was nothing in the accounts I heard of you.

Phil. Pray, what were those?

Hyl. You were represented in last night's conversation, as one who maintained the most extravagant opinion that ever entered into the mind of man, *viz.*, that there is no such thing as *material substance* in the world.

Phil. That there is no such thing as what philosophers call *material substance*, I am seriously persuaded: but, if I were made to see anything absurd or sceptical in this, I should then have the same reason to renounce this that I imagine I have now to reject the contrary opinion.

Hyl. What! can anything be more fantastical, more repugnant to common sense, or a more manifest piece of scepticism, than to believe there is no such thing as *matter*?

Phil. Softly, good *Hylas*. What if it should prove, that you, who hold there is, are, by vertue of that opinion, a greater *sceptic*, and maintain more paradoxes and repugnances to common sense, than I who believe no such thing?

Hyl. You may as soon persuade me, the part is greater than the whole, as that, in order to avoid absurdity and scepticism, I should ever be obliged to give up my opinion in this point.

Phil. Well then, are you content to admit that opinion for true, which, upon examination, shall appear most agreeable to common sense, and remote from scepticism?

Hyl. With all my heart. Since you are for raising disputes about the plainest things in nature, I am content for once to hear what you have to say.

Phil. Pray, *Hylas*, what do you mean by a *sceptic*?

Hyl. I mean what all men mean, one that doubts of every thing.

Phil. He then who entertains no doubt concerning some particular point, with regard to that point cannot be thought a *sceptic*.

Hyl. I agree with you.

Phil. Whether doth doubting consist in embracing the affirmative or negative side of a question?

Hyl. In neither; for whoever understands English cannot but know that *doubting* signifies a suspense between both.

Phil. He then that denies any point, can no more be said to doubt of it, than he who affirms it with the same degree of assurance.

Hyl. True.

Phil. And, consequently, for such his denial is no more to be esteemed a *sceptic* than the other.

Hyl. I acknowledge it.

Phil. How comes it to pass then, *Hylas*, that you pronounce me a *sceptic*, because I deny what you affirm, *viz.*, the existence of matter? Since, for aught you can tell, I am as peremptory in my denial, as you in your affirmation.

Hyl. Hold, *Philonous*, I have been a little out in my definition; but every false step a man makes in discourse is not to be insisted on. I said, indeed, that a *sceptic* was one who doubted of every thing; but I should have added, or who denies the reality and truth of things.

Phil. What things? Do you mean the principles and theoremes

of sciences? But these you know are universal intellectual notions, and consequently independent of matter; the denial therefore of this doth not imply the denying them.

Hyl. I grant it. But are there no other things? What think you of distrusting the senses, of denying the real existence of sensible things, or pretending to know nothing of them. Is not this sufficient to denominate a man a *sceptic*?

Phil. Shall we therefore examine which of us it is that denies the reality of sensible things, or professes the greatest ignorance of them; since, if I take you rightly, he is to be esteemed the greatest *sceptic*?

Hyl. That is what I desire.

Phil. What mean you by sensible things?

Hyl. Those things which are perceived by the senses. Can you imagine that I mean anything else?

Phil. Pardon me, *Hylas*, if I am desirous clearly to apprehend your notions, since this may much shorten our inquiry. Suffer me then to ask you this farther question. Are those things only perceived by the senses which are perceived immediately? Or, may those things properly be said to be *sensible* which are perceived mediately, or not without the intervention of others?

Hyl. I do not sufficiently understand you.

Phil. In reading a book, what I immediately perceive are the letters, but mediately, or by means of these, are suggested to my mind the notions of God, virtue, truth, &c. Now, that the letters are truly sensible things, or perceived by sense, there is no doubt: but I would know whether you take the things suggested by them to be so too.

Hyl. No, certainly; it were absurd to think *God* or *virtue* sensible things, tho' they may be signified and suggested to the mind by sensible marks, with which they have an arbitrary connexion.

Phil. It seems then, that by *sensible things* you mean those only which can be perceived immediately by sense.

Hyl. Right.

Phil. Does it not follow from this, that tho' I see one part of the sky red, and another blue, and that my reason doth thence evidently conclude there must be some cause of that diversity of colours, yet that cause cannot be said to be a sensible thing, or perceived by the sense of seeing?

Hyl. It doth.

Phil. In like manner, tho' I hear variety of sounds, yet I cannot be said to hear the causes of those sounds?

Hyl. You cannot.

Phil. And when by my touch I perceive a thing to be hot and heavy, I cannot say, with any truth or propriety, that I feel the cause of its heat or weight.

Hyl. To prevent any more questions of this kind, I tell you once for all, that by *sensible things* I mean those only which are perceived by sense, and that in truth the senses perceive nothing which they do not perceive immediately: for they make no inferences. The deducing therefore of causes or occasions from effects and appearances, which alone are perceived by sense, intirely relates to reason.

Phil. This point then is agreed between us, that *sensible things are those only which are immediately perceived by sense*. You will farther inform me, whether we immediately perceive by sight anything beside light, and colours, and figures; or by hearing, anything but sounds; by the palate, anything beside tastes; by the smell, beside odours; or by the touch, more than tangible qualities.

Hyl. We do not.

Phil. It seems, therefore, that if you take away all sensible qualities, there remains nothing sensible.

Hyl. I grant it.

Phil. Sensible things therefore are nothing else but so many sensible qualities, or combinations of sensible qualities.

Hyl. Nothing else.

Phil. Heat is then a sensible thing.

Hyl. Certainly.

Phil. Doth the reality of sensible things consist in being perceived? or, is it something distinct from their being perceived, and that bears no relation to the mind?

Hyl. To *exist* is one thing, and to be *perceived* is another.

Phil. I speak with regard to sensible things only: and of these I ask, whether by their real existence you mean a subsistence exterior to the mind, and distinct from their being perceived?

Hyl. I mean a real absolute being, distinct from, and without any relation to their being perceived.

Phil. Heat therefore, if it be allowed a real being, must exist without the mind?

Hyl. It must.

Phil. Tell me, *Hylas*, is this real existence equally compatible to all degrees of heat, which we perceive; or is there any reason why we should attribute it to some, and deny it to others? and if there be, pray let me know that reason.

Hyl. Whatever degree of heat we perceive by sense, we may be sure, the same exists in the object that occasions it.

Phil. What! the greatest as well as the least?

Hyl. I tell you, the reason is plainly the same in respect of both: they are both perceived by sense; nay, the greater degree of heat is more sensibly perceived; and consequently, if there is any difference, we are more certain of its real existence than we can be of the reality of a lesser degree.

Phil. But is not the most vehement and intense degree of heat a very great pain?

Hyl. No one can deny it.

Phil. And is any unperceiving thing capable of pain or pleasure?

Hyl. No certainly.

Phil. Is your material substance a senseless being, or a being endowed with sense and perception?

Hyl. It is senseless, without doubt.

Phil. It cannot therefore be the subject of pain.

Hyl. By no means.

Phil. Nor consequently of the greatest heat perceived by sense, since you acknowledge this to be no small pain.

Hyl. I grant it.

Phil. What shall we say then of your external object; is it a material substance, or no?

Hyl. It is a material substance with the sensible qualities inhering in it.

Phil. How then can a great heat exist in it, since you own it cannot in a material substance? I desire you would clear this point.

Hyl. Hold, *Philonous*, I fear I was out in yielding intense heat to be a pain. It should seem rather, that pain is something distinct from heat, and the consequence or effect of it.

Phil. Upon putting your hand near the fire, do you perceive one simple uniform sensation, or two distinct sensations?

Hyl. But one simple sensation.

Phil. Is not the heat immediately perceived?

Hyl. It is.

Phil. And the pain?

Hyl. True.

Phil. Seeing therefore they are both immediately perceived at the same time, and the fire affects you only with one simple or, uncompounded idea, it follows, that this same simple idea is both the intense heat immediately perceived, and the pain; and, consequently, that the intense heat immediately perceived, is nothing distinct from a particular sort of pain.

Hyl. It seems so.

Phil. Again, try in your thoughts, *Hylas*, if you can conceive a vehement sensation to be without pain, or pleasure.

Hyl. I cannot.

Phil. Or can you frame to yourself an idea of sensible pain or pleasure, in general, abstracted from every particular idea of heat, cold, tastes, smells? &c.

Hyl. I do not find that I can.

Phil. Does it not, therefore, follow, that sensible pain is nothing distinct from those sensations or ideas, in an intense degree?

Hyl. It is undeniable; and, to speak the truth, I begin to suspect, a very great heat cannot exist but in a mind perceiving it.

Phil. What! are you then in that *sceptical* state of suspense, between affirming and denying?

Hyl. I think I may be positive in the point. A very violent and painful heat cannot exist without the mind.

Phil. It hath not therefore, according to you, any real being.

Hyl. I own it.

Phil. Is it therefore certain, that there is no body in nature really hot?

Hyl. I have not denied there is any real heat in bodies. I only say, there is no such thing as an intense real heat.

Phil. But, did you not say before that all degrees of heat were equally real; or, if there was any difference, that the greater were more undoubtedly real than the lesser?

Hyl. True: but it was, because I did not then consider the ground there is for distinguishing between them, which I now plainly see. And it is this: because intense heat is nothing else

but a particular kind of painful sensation; and pain cannot exist but in a perceiving being; it follows that no intense heat can really exist in an unperceiving corporeal substance. But this is no reason, why we should deny heat in an inferior degree, to exist in such a substance.

Phil. But, how shall we be able to discern those degrees of heat which exist only in the mind, from those which exist without it?

Hyl. That is no difficult matter. You know the least pain cannot exist unperceived; whatever, therefore, degree of heat is a pain exists only in the mind. But, as for all other degrees of heat, nothing obliges us to think the same of them.

Phil. I think you granted before, that no unperceiving being was capable of pleasure, any more than of pain.

Hyl. I did.

Phil. And is not warmth, or a more gentle degree of heat than what causes uneasiness, a pleasure?

Hyl. What then?

Phil. Consequently, it cannot exist without the mind in an unperceiving substance, or body.

Hyl. So it seems.

Phil. Since, therefore, as well those degrees of heat that are not painful, as those that are, can exist only in a thinking substance, may we not conclude, that external bodies are absolutely incapable of any degree of heat whatsoever?

Hyl. On second thoughts, I do not think it is so evident that warmth is a pleasure, as that a great degree of heat is a pain.

Phil. I do not pretend, that warmth is as great a pleasure as heat is a pain. But, if you grant it to be even a small pleasure, it serves to make good my conclusion.

Hyl. I could rather call it an *indolence*. It seems to be nothing more than a privation of both pain and pleasure. And that such a quality or state as this may agree to an unthinking substance, I hope you will not deny.

Phil. If you are resolved to maintain that warmth, or a gentle degree of heat, is no pleasure, I know not how to convince you otherwise, than by appealing to your own sense. But what think you of cold?

Hyl. The same that I do of heat. An intense degree of cold is a pain; for to feel a very great cold, is to perceive a great uneasiness:

it cannot, therefore, exist without the mind; but a lesser degree of cold may, as well as a lesser degree of heat.

Phil. Those bodies, therefore, upon whose application to our own, we perceive a moderate degree of heat, must be concluded to have a moderate degree of heat or warmth in them: and those, upon whose application we feel a like degree of cold, must be thought to have cold in them.

Hyl. They must.

Phil. Can any doctrine be true that necessarily leads a man into an absurdity?

Hyl. Without doubt, it cannot.

Phil. Is it not an absurdity to think, that the same thing should be at the same time both cold and warm?

Hyl. It is.

Phil. Suppose now one of your hands hot, and the other cold, and that they are both at once put into the same vessel of water, in an intermediate state; will not the water seem cold to one hand, and warm to the other?

Hyl. It will.

Phil. Ought we not, therefore, by your principles to conclude, it is really both cold and warm at the same time, that is, according to your own concession, to believe an absurdity.

Hyl. I confess, it seems so.

Phil. Consequently, the principles themselves are false, since you have granted, that no true principle leads to an absurdity.

Hyl. But, after all, can anything be more absurd than to say, *there is no heat in the fire?*

Phil. To make the point still clearer; tell me whether, in two cases exactly alike, we ought not to make the same judgment?

Hyl. We ought.

Phil. When a pin pricks your finger, doth it not rend and divide the fibres of your flesh?

Hyl. It does.

Phil. And when a coal burns your finger, doth it any more?

Hyl. It does not.

Phil. Since, therefore, you neither judge the sensation itself occasioned by the pin, nor any thing like it to be in the pin; you should not, conformably to what you have now granted, judge the

sensation, occasioned by the fire, or any thing like it, to be in the fire.

Hyl. Well, since it must be so, I am content to yield this point, and acknowledge that heat and cold are only sensations existing in our minds: but there still remain qualities enough to secure the reality of external things.

Phil. But, what will you say, *Hylas*, if it shall appear that the case is the same with regard to all other sensible qualities, and that they can no more be supposed to exist without the mind, than heat and cold?

Hyl. Then indeed you will have done something to the purpose; but that is what I despair of seeing proved.

Phil. Let us examine them in order. What think you of *tastes*, do they exist without the mind, or no?

Hyl. Can any man in his senses doubt whether sugar is sweet, or wormwood bitter?

Phil. Inform me, *Hylas*. Is a sweet taste a particular kind of pleasure or pleasant sensation, or is it not?

Hyl. It is.

Phil. And is not bitterness some kind of uneasiness or pain?

Hyl. I grant it.

Phil. If therefore sugar and wormwood are unthinking corporeal substances existing without the mind, how can sweetness and bitterness, that is, pleasure and pain, agree to them?

Hyl. Hold, *Philonous*, I now see what it was deluded me all this time. You asked whether heat and cold, sweetness and bitterness, were not particular sorts of pleasure and pain; to which I answered simply, that they were. Whereas I should have thus distinguished: those qualities, as perceived by us, are pleasures or pains, but not as existing in the external objects. We must not therefore conclude absolutely, that there is no heat in the fire, or sweetness in the sugar, but only that heat or sweetness, as perceived by us, are not in the fire or sugar. What say you to this?

Phil. I say it is nothing to the purpose. Our discourse proceeded altogether concerning sensible things, which you defined to be the things we *immediately perceive by our senses*. Whatever other qualities, therefore, you speak of, as distinct from these, I know nothing of them, neither do they at all belong to the point in dispute. You may, indeed, pretend to have discovered certain qualities which you

do not perceive, and assert those insensible qualities exist in fire and sugar. But what use can be made of this to your present purpose, I am at a loss to conceive. Tell me then once more, do you acknowledge that heat and cold, sweetness and bitterness (meaning those qualities which are perceived by the senses) do not exist without the mind?

Hyl. I see it is to no purpose to hold out, so I give up the cause as to those mentioned qualities. Though I profess it sounds oddly, to say that sugar is not sweet.

Phil. But for your farther satisfaction, take this along with you: that which at other times seems sweet, shall, to a distempered palate, appear bitter. And, nothing can be plainer than that divers persons perceive different tastes in the same food; since that which one man delights in, another abhors. And how could this be, if the taste was something really inherent in the food?

Hyl. I acknowledge I know not how.

Phil. In the next place, odors are to be considered. And with regard to these, I would fain know, whether what has been said of tastes does not exactly agree to them? Are they not so many pleasing or displeasing sensations?

Hyl. They are.

Phil. Can you then conceive it possible that they should exist in an unperceiving thing?

Hyl. I cannot.

Phil. Or, can you imagine that filth and ordure affect those brute animals that feed on them out of choice, with the same smells which we perceive in them?

Hyl. By no means.

Phil. May we not, therefore, conclude of smells, as of the other forementioned qualities, that they cannot exist in any but a perceiving substance or mind?

Hyl. I think so.

Phil. Then as to sounds, what must we think of them: are they accidents really inherent in external bodies, or not?

Hyl. That they inhere not in the sonorous bodies, is plain from hence; because a bell struck in the exhausted receiver of an air-pump, sends forth no sound. The air, therefore, must be thought the subject of sound.

Phil. What reason is there for that, *Hylas*?

Hyl. Because, when any motion is raised in the air, we perceive a sound greater or lesser, in proportion to the air's motion; but without some motion in the air, we never hear any sound at all.

Phil. And granting that we never hear a sound but when some motion is produced in the air, yet I do not see how you can infer from thence, that the sound itself is in the air.

Hyl. It is this very motion in the external air that produces in the mind the sensation of *sound*. For, striking on the drum of the ear, it causes a vibration, which by the auditory nerves being communicated to the brain, the soul is thereupon affected with the sensation called *sound*.

Phil. What! is sound then a sensation?

Hyl. I tell you, as perceived by us, it is a particular sensation in the mind.

Phil. And can any sensation exist without the mind?

Hyl. No certainly.

Phil. How then can sound, being a sensation, exist in the air, if by the *air* you mean a senseless substance existing without the mind?

Hyl. You must distinguish, *Philonous*, between sound as it is perceived by us, and as it is in itself; or (which is the same thing) between the sound we immediately perceive, and that which exists without us. The former, indeed, is a particular kind of sensation, but the latter is merely a vibrative or undulatory motion in the air.

Phil. I thought I had already obviated that distinction, by the answer I gave when you were applying it in a like case before. But, to say no more of that, are you sure then that sound is really nothing but motion?

Hyl. I am.

Phil. Whatever therefore agrees to real sound, may with truth be attributed to motion?

Hyl. It may.

Phil. It is then good sense to speak of *motion* as of a thing that is *loud, sweet, acute, or grave*.

Hyl. I see you are resolved not to understand me. Is it not evident those accidents or modes belong only to sensible sound, or *sound* in the common acceptation of the word, but not to *sound* in the real and philosophic sense; which, as I just now told you, is nothing but a certain motion of the air?

Phil. It seems then there are two sorts of sound, the one vulgar, or that which is heard, the other philosophical and real.

Hyl. Even so.

Phil. And the latter consists in motion.

Hyl. I told you so before.

Phil. Tell me, *Hylas*, to which of the senses, think you, the idea of motion belongs: to the hearing?

Hyl. No, certainly; but to the sight and touch.

Phil. It should follow then, that, according to you, real sounds may possibly be *seen* or *felt*, but never *heard*.

Hyl. Look you, *Philonous*, you may, if you please, make a jest of my opinion, but that will not alter the truth of things. I own, indeed, the inferences you draw me into, sound something oddly; but common language, you know, is framed by, and for the use of the vulgar: we must not therefore wonder, if expressions, adapted to exact philosophic notions seem uncouth and out of the way.

Phil. Is it come to that? I assure you I imagine myself to have gained no small point, since you make so light of departing from common phrases and opinions; it being a main part of our inquiry, to examine whose notions are widest of the common road, and most repugnant to the general sense of the world. But, can you think it no more than a philosophical paradox, to say that *real sounds are never heard*, and that the idea of them is obtained by some other sense. And is there nothing in this contrary to nature, and the truth of things?

Hyl. To deal ingenuously, I do not like it. And after the concessions already made, I had as good grant that sounds too have no real being without the mind.

Phil. And, I hope, you will make no difficulty to acknowledge the same of colours.

Hyl. Pardon me: the case of colours is very different. Can anything be plainer than that we see them on the objects?

Phil. The objects you speak of are, I suppose, corporeal substances existing without the mind.

Hyl. They are.

Phil. And, have true and real colours inhering in them?

Hyl. Each visible object hath that colour which we see in it.

Phil. How! is there anything visible but what we perceive by sight?

Hyl. There is not.

Phil. And, do we perceive anything by sense which we do not perceive immediately?

Hyl. How often must I be obliged to repeat the same thing? I tell you, we do not.

Phil. Have patience, good *Hylas*; and tell me once more, whether there is anything immediately perceived by the senses, except sensible qualities. I know you asserted there was not; but I would now be informed, whether you still persist in the same opinion.

Hyl. I do.

Phil. Pray, is your corporeal substance either a sensible quality, or made up of sensible qualities?

Hyl. What a question that is! who ever thought it was?

Phil. My reason for asking was, because in saying, *each visible object has that colour which we see in it*, you make visible objects to be corporeal substances; which implies either that corporeal substances are sensible qualities, or else, that there is something beside sensible qualities perceived by sight: but, as this point was formerly agreed between us, and is still maintained by you, it is a clear consequence, that your corporeal substance is nothing distinct from sensible qualities.

Hyl. You may draw as many absurd consequences as you please, and endeavor to perplex the plainest things; but you shall never persuade me out of my senses. I clearly understand my own meaning.

Phil. I wish you would make me understand it too. But, since you are unwilling to have your notion of corporeal substance examined, I shall urge that point no farther. Only be pleased to let me know, whether the same colours which we see, exist in external bodies, or some other.

Hyl. The very same.

Phil. What! are then the beautiful red and purple we see on yonder clouds, really in them? Or do you imagine they have in themselves any other form, than that of a dark mist, or vapour?

Hyl. I must own, *Philonous*, those colours are not really in the clouds as they seem to be at this distance. They are only apparent colours.

Phil. *Apparent* call you them; how shall we distinguish these apparent colours from real?

Hyl. Very easily. Those are to be thought apparent which, appearing only at a distance, vanish upon a nearer approach.

Phil. And those, I suppose, are to be thought real which are discovered by the most near and exact survey.

Hyl. Right.

Phil. Is the nearest and exactest survey made by the help of a microscope, or by the naked eye?

Hyl. By a microscope, doubtless.

Phil. But a microscope often discovers colours in an object different from those perceived by the unassisted sight. And, in case we had microscopes, magnifying to any assigned degree; it is certain that no object whatsoever, viewed through them, would appear in the same colour which it exhibits to the naked eye.

Hyl. And what will you conclude from all this? You cannot argue that there are really and naturally no colours on objects: because, by artificial managements they may be altered, or made to vanish.

Phil. I think it may evidently be concluded from your own concessions, that all the colours we see with our naked eyes, are only apparent as those on the clouds, since they vanish upon a more close and accurate inspection, which is afforded us by a microscope. Then, as to what you say by way of prevention: I ask you whether the real and natural state of an object is better discovered by a very sharp and piercing sight, or by one which is less sharp?

Hyl. By the former, without doubt.

Phil. Is it not plain from *Dioptrics*, that microscopes make the sight more penetrating, and represent objects as they wou'd appear to the eye, in case it were naturally endowed with a most exquisite sharpness?

Hyl. It is.

Phil. Consequently, the microscopical representation is to be thought that which best sets forth the real nature of the thing, or what it is in itself. The colours, therefore, by it perceived are more genuine and real than those perceived otherwise.

Hyl. I confess there is something in what you say.

Phil. Besides, it is not only possible, but manifest, that there actually are animals, whose eyes are by nature framed to perceive those things which, by reason of their minuteness, escape our sight. What think you of those inconceivably small animals, perceived

by glasses? must we suppose they are all stark blind? Or, in case they see, can it be imagined their sight has not the same use in preserving their bodies from injuries, which appears in that of all other animals? and if it hath, is it not evident, they must see particles less than their own bodies, which will present them with a far different view in each object from that which strikes our senses? Even our own eyes do not always represent objects to us after the same manner. In the *jaundice*, every one knows that all things seem yellow. Is it not, therefore, highly probable, those animals, in whose eyes we discern a very different texture from that of ours, and whose bodies abound with different humors, do not see the same colours in every object that we do? From all which, shou'd it not seem to follow, that all colours are equally apparent, and that none of those which we perceive are really inherent in any outward object?

Hyl. It should.

Phil. The point will be past all doubt, if you consider, that in case colours were real properties or affections inherent in external bodies, they cou'd admit of no alteration, without some change wrought in the very bodies themselves: but, is it not evident from what hath been said, that, upon the use of microscopes, upon a change happening in the humors of the eye, or a variation of distance, without any manner of real alteration in the thing itself, the colours of any object are either changed, or totally disappear? Nay, all other circumstances remaining the same, change but the situation of some objects, and they shall present different colours to the eye. The same thing happens upon viewing an object in various degrees of light. And what is more known, than that the same bodies appear differently coloured by candlelight, from what they do in the open day? Add to these, the experiment of a prism, which, separating the heterogeneous rays of light, alters the colour of any object; and will cause the whitest to appear of a deep blue or red to the naked eye. And now tell me, whether you are still of opinion that every body has its true real colour inhering in it; and, if you think it has, I would fain know farther from you, what certain distance and position of the object, what peculiar texture and formation of the eye, what degree or kind of light is necessary for ascertaining that true colour, and distinguishing it from apparent ones.

Hyl. I own myself intirely satisfied, that they are all equally apparent, and that there is no such thing as colour really inhering in external bodies, but that it is altogether in the light. And what confirms me in this opinion is, that in proportion to the light colours are still more or less vivid; and if there be no light, then are there no colours perceived. Besides, allowing there are colours on external objects, yet, how is it possible for us to perceive them? For no external body affects the mind, unless it act first on our organs of sense. But the only action of bodies is motion; and motion cannot be communicated otherwise than by impulse. A distant object, therefore, cannot act on the eye, nor, consequently, make itself or its properties perceivable to the soul. Whence it plainly follows that it is immediately some contiguous substance, which, operating on the eye, occasions a perception of colours: and such is light.

Phil. How! is light then a substance?

Hyl. I tell you, *Philonous*, external light is nothing but a thin, fluid substance, whose minute particles being agitated with a brisk motion, and in various manners reflected from the different surfaces of outward objects to the eyes, communicate different motions to the optick nerves; which being propagated to the brain, cause therein various impressions: and these are attended with the sensations of red, blue, yellow, &c.

Phil. It seems then, the light does no more than shake the optick nerves.

Hyl. Nothing else.

Phil. And consequent to each particular motion of the nerves, the mind is affected with a sensation, which is some particular colour.

Hyl. Right.

Phil. And these sensations have no existence without the mind.

Hyl. They have not.

Phil. How then do you affirm, that colours are in the light, since by *light* you understand a corporeal substance external to the mind?

Hyl. Light and colours, as immediately perceived by us, I grant cannot exist without the mind. But, in themselves, they consist intirely in the motions and configurations of certain insensible particles of matter.

Phil. Colours, then, in the vulgar sense, or taken for the immediate objects of sight, cannot agree to any but a perceiving substance.

Hyl. That is what I say.

Phil. Well then, since you give up the point as to those sensible qualities, which are alone thought colours by all mankind beside, you may hold what you please with regard to those invisible ones of the philosophers. It is not my business to dispute about them; only I would advise you to bethink yourself, whether, considering the inquiry we are upon, it be prudent for you to affirm, *the red and blue which we see are not real colours, but certain unknown motions and figures which no man ever did nor can see are truly so.* Are not these shocking notions, and are not they subject to as many ridiculous inferences, as those you were obliged to renounce before in the case of sounds?

Hyl. I frankly own, *Philonous*, that it is in vain to stand out any longer. Colours, sounds, tastes, in a word all those termed *secondary qualities*, have certainly no existence without the mind. But by this acknowledgment, I must not be supposed to derogate anything from the reality of matter, or external objects; seeing it is no more than several philosophers maintain, who nevertheless are the farthest imaginable from denying matter. For the clearer understanding of this, you must know, sensible qualities are by philosophers divided into *primary* and *secondary*. The former are extension, figure, solidity, gravity, motion, and rest; and these they hold exist really in bodies. The latter are those above enumerated; or, briefly, all sensible qualities beside the primary, which they assert are only so many sensations or ideas existing nowhere but in the mind. But in all this, I doubt not, you are apprised of. For my part, I have been a long time sensible there was such an opinion current among philosophers, but was never thoroughly convinced of its truth until now.

Phil. You are still then of opinion that extension and figures are inherent in external unthinking substances.

Hyl. I am.

Phil. But, what if the same arguments which are brought against secondary qualities, will hold good against these also?

Hyl. Why, then I shall be obliged to think, they too exist only in the mind.

Phil. Is it your opinion, the very figure and extension which you perceive by sense, exist in the outward object or material substance?

Hyl. It is.

Phil. Have all others animals as good grounds to think the same, of the figure and extension which they see and feel?

Hyl. Without doubt, if they have any thought at all.

Phil. Answer me, *Hylas*. Think you the senses were bestowed upon all animals for their preservation and well-being in life? or, were they given to men alone for this end?

Hyl. I make no question but they have the same use in all other animals.

Phil. If so, is it not necessary they should be enabled by them to perceive their own limbs, and those bodies which are capable of harming them?

Hyl. Certainly.

Phil. A mite therefore must be supposed to see his own foot, and things equal, or even less than it, as bodies of some considerable dimension; tho' at the same time they appear to you scarce discernible, or, at best, as so many visible points?

Hyl. I cannot deny it.

Phil. And to creatures less than the mite they will seem yet larger.

Hyl. They will.

Phil. Insomuch that what you can hardly discern, will to another extremely minute animal appear as some huge mountain.

Hyl. All this I grant.

Phil. Can one and the same thing be at the same time in itself of different dimensions?

Hyl. That were absurd to imagine.

Phil. But from what you have laid down it follows, that both the extension by you perceived, and that perceived by the mite itself, as likewise all those perceived by lesser animals, are each of them the true extension of the mite's foot; that is to say, by your own principles you are led into an absurdity.

Hyl. There seems to be some difficulty in the point.

Phil. Again, have you not acknowledged that no real inherent property of any object can be changed, without some change in the thing itself?

Hyl. I have.

Phil. But, as we approach to or recede from an object, the visible extension varies, being at one distance ten or a hundred times greater than at another. Doth it not therefore follow from hence likewise that it is not really inherent in the object?

Hyl. I own I am at a loss what to think.

Phil. Your judgment will soon be determined, if you will venture to think as freely with relation to this quality, as you have done concerning the rest. Was it not admitted as a good argument, that neither heat nor cold was in the water, because it seemed warm to one hand and cold to the other?

Hyl. It was.

Phil. Is it not the very same reasoning to conclude, there is no extension or figure in an object, because to one eye it shall seem little, smooth, and round, when at the same time it appears to the other, great, uneven, and angular?

Hyl. The very same. But does this latter fact ever happen?

Phil. You may at any time make the experiment, by looking with one eye bare, and with the other thro' a microscope.

Hyl. I know not how to maintain it, and yet I am loath to give up *extension*, I see so many odd consequences following upon such a concession.

Phil. *Od*, say you? After the concessions already made, I hope you will stick at nothing for its oddness.⁴

Hyl. I give up the point for the present, reserving still a right to retract my opinion, in case I shall hereafter discover any false step in my progress to it.

Phil. That is a right you cannot be denied. Figures and extension being despatched, we proceed next to *motion*. Can a real motion in any external body be at the same time both very swift and very slow?

⁴ Added to this speech of Philonous in the third edition:

"But, on the other hand, should it not seem very odd, if the general reasoning which includes all other sensible qualities did not also include extension? If it be allowed that no idea nor anything like an idea can exist in an unperceiving substance, then surely it follows that no figure or mode of extension, which we can either perceive or imagine, or have any idea of, can be really inherent in matter; not to mention the peculiar difficulty there must be in conceiving a material substance, prior to and distinct from extension, to be the *substratum* of extension. Be the sensible quality what it will—figure, or sound, or colour; it seems alike impossible it should subsist in that which doth not perceive it."

Hyl. It cannot.

Phil. Is not the motion of a body swift in a reciprocal proportion to the time it takes up in describing any given space? Thus a body that describes a mile in an hour moves three times faster than it would in case it described only a mile in three hours.

Hyl. I agree with you.

Phil. And is not time measured by the succession of ideas in our minds?

Hyl. It is.

Phil. And is it not possible ideas should succeed one another twice as fast in your mind, as they do in mine, or in that of some spirit of another kind.

Hyl. I own it.

Phil. Consequently the same body may to another seem to perform its motion over any space, in half the time that it does to you. And the same reasoning will hold as to any other proportion: that is to say, according to your principles (since the motions perceived are both really in the object) it is possible one and the same body shall be really moved, the same way, at once, both very swift, and very slow. How is this consistent either with common sense, or with what you just now granted?

Hyl. I have nothing to say to it.

Phil. Then as for *solidity*; either you do not mean any sensible quality by that word, and so it is beside our inquiry: or if you do, it must be either hardness or resistance. But both the one and the other are plainly relative to our senses: it being evident, that what seems hard to one animal may appear soft to another, who hath greater force and firmness of limbs. Nor is it less plain that the resistance I feel is not in the body.

Hyl. I own, the very sensation of resistance, which is all you immediately perceive, is not in the body, but the cause of that sensation is.

Phil. But, the causes of our sensations are not things immediately perceived, and therefore not sensible. This point I thought had been already determined.

Hyl. I own it was; but you will pardon me if I seem a little embarrassed: I know not how to quit my old notions.

Phil. To help you out, do but consider, that if *extension* be once acknowledged to have no existence without the mind, the same

must necessarily be granted of motion, solidity, and gravity, since they all evidently suppose extension. It is therefore superfluous to inquire particularly concerning each of them. In denying extension, you have denied them all to have any real existence.

Hyl. I wonder, *Philonous*, if what you say be true, why those philosophers who deny the secondary qualities any real existence, should yet attribute it to the primary. If there is no difference between them, how can this be accounted for?

Phil. It is not my business to account for every opinion of the philosophers. But among other reasons which may be assigned for this, it seems probable, that pleasure and pain being rather annexed to the former, than the latter, may be one. Heat and cold, tastes, smells, &c. have something more vividly pleasing or disagreeable than the ideas of extension, figure, and motion affect us with. And, it being too visibly absurd to hold that pain or pleasure can be in an unperceiving substance, men are more easily weaned from believing the external existence of the secondary, than the primary qualities. You will be satisfied there is something in this, if you recollect the difference you made between an intense and more moderate degree of heat, allowing the one a real existence, while you denied it to the other. But, after all, there is no rational ground for that distinction; for surely an indifferent sensation is as truly *a sensation*, as one more pleasing or painful; and, consequently, should not any more than they be supposed to exist in an unthinking subject.

Hyl. It is just come into my head, *Philonous*, that I have somewhere heard of a distinction between absolute and sensible extension. Now, though it be acknowledged that *great* and *small*, consisting merely in the relation which other extended beings have to the parts of our own bodies, do not really inhere in the substances themselves; yet nothing obliges us to hold the same with regard to *absolute extension*, which is something abstracted from *great* and *small*, from this or that particular magnitude or figure. So likewise as to motion; *swift* and *slow* are altogether relative to the succession of ideas in our own minds. But, it does not follow, because those modifications of motion exist not without the mind, that therefore absolute motion abstracted from them does not.

Phil. Pray, what is it that distinguishes one motion, or one part of extension, from another, is it not something sensible, as

some degree of swiftness or slowness, some certain magnitude or figure peculiar to each?

Hyl. I think so.

Phil. These qualities, therefore, stripped of all sensible properties, are without all specific and numerical differences, as the schools call them.

Hyl. They are.

Phil. That is to say, they are extension in general, and motion in general.

Hyl. Let it be so.

Phil. But it is an universally received maxim, that, *Everything which exists is particular*. How then can motion in general, or extension in general, exist in any corporeal substance?

Hyl. I will take time to solve your difficulty.

Phil. But I think the point may be speedily decided. Without doubt you can tell, whether you are able to frame this or that idea. Now, I am content to put our dispute on this issue. If you can frame in your thoughts a distinct abstract idea of motion or extension divested of all those sensible modes, as swift and slow, great and small, round and square, and the like, which are acknowledged to exist only in the mind, I will then yield the point you contend for. But, if you cannot, it will be unreasonable on your side, to insist any longer upon what you have no notion of.

Hyl. To confess ingenuously, I cannot.

Phil. Can you even separate the ideas of extension and motion, from the ideas of all those qualities which they who make the distinction, term *secondary*?

Hyl. What! is it not an easy matter, to consider extension and motion by themselves, abstracted from all other sensible qualities? Pray, how do the mathematicians treat of them?

Phil. I acknowledge, *Hylas*, it is not difficult to form general propositions and reasonings about those qualities, without mentioning any other; and in this sense, to consider or treat of them abstractedly. But, how does it follow, that because I can pronounce the word *motion*, by itself, I can form the idea of it in my mind exclusive of body? or, because theorems may be made of extension and figures, without any mention of *great*, or *small*, or any other sensible mode or quality? That, therefore, it is possible such an abstract idea of extension, without any particular size, colour,

&c. shou'd be distinctly formed, and apprehended by the mind? Mathematicians treat of quantity, without regarding what other sensible qualities it is attended with, as being altogether indifferent to their demonstrations. But, when laying aside the words, they contemplate the bare ideas, I believe you will find, they are not the pure abstracted ideas of extension.

Hyl. But what say you to *pure intellect*? may not abstracted idea be framed by that faculty?

Phil. Since I cannot frame abstract ideas at all, it is plain, I cannot frame them by the help of *pure intellect*, whatsoever faculty you understand by those words. Besides, not to inquire into the nature of pure intellect and its spiritual objects, as *virtue*, *reason*, *God*, or the like; thus much seems manifest, that sensible things are only to be perceived by sense, or represented by the imagination. Figures, therefore, and extension, being originally perceived by sense, do not belong to pure intellect. But, for your farther satisfaction, try if you can frame the idea of any figure, abstracted from all particularities of size, or even from other sensible qualities.

Hyl. Let me think a little—— I do not find that I can.

Phil. And can you think it possible, that shou'd really exist in nature, which implies a repugnancy in its conception?

Hyl. By no means.

Phil. Since therefore it is impossible, even for the mind to disunite the ideas of extension and motion from all other sensible qualities, does it not follow, that where the one exist there, necessarily, the other exist likewise?

Hyl. It should seem so.

Phil. Consequently, the very same arguments which you admitted, as conclusive against the secondary qualities are, without any farther application of force, against the primary too. Besides, if you will trust your senses, is it not plain, all sensible qualities coexist, or, to them, appear as being in the same place? Do they ever represent a motion, or figure, as being divested of all other visible and tangible qualities?

Hyl. You need say no more on this head. I am free to own, if there be no secret error, or oversight, in our proceedings hitherto, that all sensible qualities are alike to be denied existence without the mind. But my fear is, that I have been too liberal in my former

concessions, or overlooked some fallacy or other. In short, I did not take time to think.

Phil. For that matter, *Hylas*, you may take what time you please, in reviewing the progress of our inquiry. You are at liberty to recover any slips you might have made, or offer whatever you have omitted which makes for your first opinion.

Hyl. One great oversight I take to be this: that I did not sufficiently distinguish the *object* from the *sensation*. Now, tho' this latter may not exist without the mind, yet it will not thence follow, that the former cannot.

Phil. What object do you mean? The object of the senses?

Hyl. The same.

Phil. It is then immediately perceived.

Hyl. Right.

Phil. Make me to understand the difference between what is immediately perceived, and a sensation.

Hyl. The sensation I take to be an act of the mind perceiving; beside which, there is something perceived; and this I call the *object*. For example, there is red and yellow on that tulip. But then the act of perceiving those colours is in me only, and not in the tulip.

Phil. What tulip do you speak of? Is it that which you see?

Hyl. The same.

Phil. And what do you see, beside colour, figure, and extension?

Hyl. Nothing.

Phil. What you would say then is, that the red and yellow are coexistent with the extension; is it not?

Hyl. That is not all; I wou'd say, they have a real existence without the mind, in some unthinking substance.

Phil. That the colours are really in the tulip which I see, is manifest. Neither can it be denied, that this tulip may exist independent of your mind or mine; but that any immediate object of the senses, *i.e.* any idea, or combination of ideas, should exist in an unthinking substance, or exterior to all minds, is in itself an evident contradiction. Nor can I imagine how this follows, from what you said just now, *viz.* that the red and yellow were on the tulip *you saw*, since you do not pretend to *see* that unthinking substance.

Hyl. You have an artful way, *Philonous*, of diverting our inquiry from the subject.

Phil. I see you have no mind to be pressed that way. To return then to your distinction between *sensation* and *object*; if I take you right, you distinguish in every perception two things, the one an action of the mind, the other not.

Hyl. True.

Phil. And this action cannot exist in, or belong to, any unthinking thing; but, whatever beside is implied in a perception may.

Hyl. That is my meaning.

Phil. So that if there was a perception without any act of the mind, it were possible such a perception should exist in an unthinking substance.

Hyl. I grant it. But it is impossible there should be such a perception.

Phil. When is the mind said to be active?

Hyl. When it produces, puts an end to, or changes, anything.

Phil. Can the mind produce, discontinue, or change anything but by an act of the will?

Hyl. It cannot.

Phil. The mind, therefore, is to be accounted active in its perceptions, so far forth as volition is included in them?

Hyl. It is.

Phil. In plucking this flower, I am active, because I do it by the motion of my hand, which was consequent upon my volition; so likewise in applying it to my nose. But is either of these smelling?

Hyl. No.

Phil. I act too, in drawing the air through my nose; because my breathing so, rather than otherwise, is the effect of my volition. But neither can this be called *smelling*: for, if it were, I should smell every time I breathed in that manner?

Hyl. True.

Phil. Smelling then is somewhat consequent to all this?

Hyl. It is.

Phil. But I do not find my will concerned any farther. Whatever more there is, as that I perceive such a particular smell, or any smell at all, this is independent of my will, and therein I am altogether passive. Do you find it otherwise with you, *Hylas*?

Hyl. No, the very same.

Phil. Then, as to seeing, is it not in your power to open your eyes, or keep them shut; to turn them this, or that way?

Hyl. Without doubt.

Phil. But does it, in like manner, depend on your will, that in looking on this flower, you perceive *white* rather than any other colour? or, directing your open eyes towards yonder part of the heaven, can you avoid seeing the sun? or, is light or darkness the effect of your volition?

Hyl. No certainly.

Phil. You are then, in these respects, altogether passive?

Hyl. I am.

Phil. Tell me now, whether *seeing* consists in perceiving light and colours, or in opening and turning the eyes?

Hyl. Without doubt, in the former.

Phil. Since, therefore, you are in the very perception of light and colours altogether passive, what is become of that action you were speaking of as an ingredient in every sensation? And, does it not follow from your own concessions, that the perception of light and colours, including no action in it, may exist in an unperceiving substance? And is not this a plain contradiction?

Hyl. I know not what to think of it.

Phil. Besides, since you distinguish the *active* and *passive* in every perception, you must do it in that of pain. But how is it possible that pain, be it as little active as you please, should exist in an unperceiving substance? In short, do but consider the point, and then confess ingenuously, whether light and colours, tastes, sounds, &c., are not all equally passions, or sensations in the soul. You may, indeed, call them *external objects*, and give them in words what subsistence you please. But examine your own thoughts, and then tell me, whether it be not as I say.

Hyl. I acknowledge, *Philonous*, that, upon a fair observation of what passes in my mind, I can discover nothing else, but that I am a thinking being, affected with variety of sensations; neither is it possible to conceive, how a sensation should exist in an unperceiving substance. But then, on the other hand, when I look on sensible things in a different view, considering them as so many modes and qualities, I find it necessary to suppose a material *substratum*, without which they cannot be conceived to exist.

Phil. *Material substratum* call you it? Pray, by which of your senses came you acquainted with that being?

Hyl. It is not itself sensible; its modes and qualites only being perceived by the senses.

Phil. I presume then it was by reflection and reason you obtained the idea of it.

Hyl. I do not pretend to any proper positive idea of it. However, I conclude it exists, because qualities cannot be conceived to exist without a support.

Phil. It seems then you have only a relative notion of it, or that you conceive it not otherwise than by conceiving the relation it bears to sensible qualities.

Hyl. Right.

Phil. Be pleased therefore to let me know wherein that relation consists.

Hyl. Is it not sufficiently expressed in the term *substratum*, or *substance*?

Phil. If so, the word *substratum* should import, that it is spread under the sensible qualities or accidents.

Hyl. True.

Phil. And consequently under extension.

Hyl. I own it.

Phil. It is, therefore, somewhat in its own nature entirely distinct from extension.

Hyl. I tell you, extension is only a mode, and matter is something that supports modes. And is it not evident the thing supported is different from the thing supporting?

Phil. So that something distinct from, and exclusive of, extension, is supposed to be the *substratum* of extension.

Hyl. Just so.

Phil. Answer me, *Hylas*. Can a thing be spread without extension, or is not the idea of extension necessarily included in *spreading*?

Hyl. It is.

Phil. Whatsoever, therefore, you suppose spread under any thing, must have in itself an extension distinct from the extension of that thing under which it is spread.

Hyl. It must.

Phil. Consequently every corporeal substance, being the *sub-*

stratum of extension, must have in itself another extension, by which it is qualified to be a *substratum*: and so on to infinity. And I ask whether this be not absurd in itself, and repugnant to what you granted just now, *viz.*, that the *substratum* was something distinct from, and exclusive of extension.

Hyl. Aye, but, *Philonous*, you take me wrong. I do not mean that matter is *spread* in a gross literal sense under extension. The word *substratum* is used only to express, in general, the same thing with *substance*.

Phil. Well then, let us examine the relation implied in the term *substance*. Is it not that it stands under accidents?

Hyl. The very same.

Phil. But, that one thing may stand under or support another, must it not be extended?

Hyl. It must.

Phil. Is not therefore this supposition liable to the same absurdity with the former?

Hyl. You still take things in a strict literal sense: that is not fair, *Philonous*.

Phil. I am not for imposing any sense on your words: you are at liberty to explain them as you please. Only I beseech you, make me understand something by them. You tell me matter supports or stands under accidents. How! is it as your legs support your body?

Hyl. No; that is the literal sense.

Phil. Pray let me know any sense, literal or not literal, that you understand it in.—How long must I wait for an answer, *Hylas*?

Hyl. I declare I know not what to say. I once thought I understood well enough what was meant by matter's supporting accidents. But now, the more I think on it, the less can I comprehend it; in short, I find that I know nothing of it.

Phil. It seems then you have no idea at all, neither relative nor positive, of matter; you know neither what it is in itself, nor what relation it bears to accidents.

Hyl. I acknowledge it.

Phil. And yet you asserted, that you could not conceive, how qualities or accidents should really exist, without conceiving at the same time a material support of them.

Hyl. I did.

Phil. That is to say, when you conceive the real existence of qualities, you do withal conceive something which you cannot conceive.

Hyl. It was wrong I own. But still I fear there is some fallacy or other. Pray what think you of this? It is just come into my head, that the ground of all our mistake lies in your treating of each quality by itself. Now, I grant that each quality cannot singly subsist without the mind. Colour cannot without extension, neither can figure without some other sensible quality. But, as the several qualities united or blended together form intire sensible things, nothing hinders why such things may not be supposed to exist without the mind.

Phil. Either, *Hylas*, you are jesting, or have a very bad memory. Though, indeed, we went through all the qualities by name one after another; yet my arguments, or rather your concessions, nowhere tended to prove that the secondary qualities did not subsist each alone by itself but, that they were not *at all* without the mind. Indeed, in treating of figure and motion, we concluded they could not exist without the mind, because it was impossible even in thought to separate them from all secondary qualities, so as to conceive them existing by themselves. But then this was not the only argument made use of upon that occasion. But (to pass by all that hath been hitherto said, and reckon it for nothing, if you will have it so) I am content to put the whole upon this issue. If you can conceive it possible for any mixture or combination of qualities, or any sensible object whatever, to exist without the mind, then I will grant it actually to be so.

Hyl. If it comes to that, the point will soon be decided. What more easy than to conceive a tree or house existing by itself, independent of, and unperceived by, any mind whatsoever? I do, at this present time, conceive them existing after that manner.

Phil. How say you, *Hylas*, can you see a thing which is at the same time unseen?

Hyl. No, that were a contradiction.

Phil. Is it not as great a contradiction to talk of *conceiving* a thing which is *unconceived*?

Hyl. It is.

Phil. The tree or house, therefore, which you think of, is conceived by you.

Hyl. How should it be otherwise?

Phil. And what is conceived, is surely in the mind.

Hyl. Without question, that which is conceived is in the mind.

Phil. How then came you to say, you conceived a house or tree existing independent and out of all minds whatsoever?

Hyl. That was, I own, an oversight; but stay, let me consider what led me into it.—It is a pleasant mistake enough. As I was thinking of a tree in a solitary place, where no one was present to see it, methought that was to conceive a tree as existing unperceived or unthought of, not considering that I myself conceived it all the while. But now I plainly see that all I can do is to frame ideas in my own mind. I may, indeed, conceive in my own thoughts the idea of a tree, or a house, or a mountain, but that is all. And this is far from proving, that I can conceive them *existing out of the minds of all spirits*.

Phil. You acknowledge then that you cannot possibly conceive, how any one corporeal sensible thing should exist otherwise than in a mind.

Hyl. I do.

Phil. And yet, you will earnestly contend for the truth of that which you cannot so much as conceive.

Hyl. I profess I know not what to think, but still there are some scruples remain with me. Is it not certain, I *see* things at a distance; do we not perceive the stars and moon, for example, to be a great way off? Is not this, I say, manifest to the senses?

Phil. Do you not in a dream too perceive those or the like objects?

Hyl. I do.

Phil. And have they not then the same appearance of being distant?

Hyl. They have.

Phil. But you do not thence conclude the apparitions in a dream to be without the mind.

Hyl. By no means.

Phil. You ought not, therefore, to conclude that sensible objects are without the mind, from their appearance, or manner wherein they are perceived.

Hyl. I acknowledge it. But doth not my sense deceive me in those cases?

Phil. By no means. The idea or thing which you immediately perceive, neither sense nor reason informs you that it actually exists without the mind. By sense you only know that you are affected with such certain sensations of light and colours, &c. And these you will not say are without the mind.

Hyl. True. But beside all that, do you not think the sight suggests something of *outness* or *distance*?

Phil. Upon approaching a distant object, do the visible size and figure change perpetually, or do they appear the same at all distances?

Hyl. They are in a continual change.

Phil. Sight therefore doth not suggest, or any way inform you, that the visible object you immediately perceive exists at a distance,⁵ or will be perceived when you advance farther onward, there being a continued series of visible objects succeeding each other, during the whole time of your approach.

Hyl. It doth not; but still I know, upon seeing an object, what object I shall perceive after having passed over a certain distance: no matter whether it be exactly the same or no: there is still something of distance suggested in the case.

Phil. Good *Hylas*, do but reflect a little on the point, and then tell me whether there be any more in it than this. From the ideas you actually perceive by sight, you have by experience learned to collect what other ideas you will (according to the standing order of nature) be affected with, after such a certain succession of time and motion.

Hyl. Upon the whole, I take it to be nothing else.

Phil. Now, is it not plain, that if we suppose a man born blind was on a sudden made to see, he could at first have no experience of what may be suggested by sight.

Hyl. It is.

Phil. He would not then, according to you, have any notion of distance annexed to the things he saw; but would take them for a new sett of sensations existing only in his mind.

Hyl. It is undeniable.

Phil. But to make it still more plain: is not *distance* a line turned endwise to the eye.

⁵ Note added by Berkeley in 1734: "See the *Essay towards a New Theory of Vision*, and its *Vindication*."

Hyl. It is.

Phil. And can a line so situated be perceived by sight?

Hyl. It cannot.

Phil. Doth it not, therefore, follow, that distance is not properly and immediately perceived by sight?

Hyl. It should seem so.

Phil. Again, is it your opinion, that colours are at a distance?

Hyl. It must be acknowledged, they are only in the mind.

Phil. But, do not colours appear to the eye as coexisting in the same place with extension and figures.

Hyl. They do.

Phil. How can you then conclude from sight, that figures exist without, when you acknowledge colours do not; the sensible appearance being the very same with regard to both?

Hyl. I know not what to answer.

Phil. But, allowing that distance was truly and immediately perceived by the mind, yet it wou'd not thence follow it existed out of the mind. For, whatever is immediately perceived is an idea: and can any *idea* exist out of the mind?

Hyl. To suppose that, were absurd. But inform me, *Philonous*, can we perceive, or know nothing beside our ideas?

Phil. As for the rational deducing of causes from effects, that is beside our inquiry. And by the senses, you can best tell, whether you perceive any thing, which is not immediately perceived. And I ask you, whether the things immediately perceived, are other than your own sensations, or ideas? You have, indeed, more than once, in the course of this conversation, expressed yourself on those points; but you seem, by this last question, to have departed from what you then thought.

Hyl. To speak the truth, *Philonous*, I think there are two kinds of objects, the one perceived immediately, which are likewise called *ideas*; the other are real things, or external objects, preceived by the mediation of ideas, which are their images and representations. Now I own, ideas cannot exist without the mind; but the latter sort of objects do. I am sorry I did not think of this distinction sooner; it would, probably, have cut short your discourse.

Phil. Are those external objects perceived by sense, or by some other faculty?

Hyl. They are perceived by sense.

Phil. How! is there anything perceived by sense, which is not immediately perceived?

Hyl. Yes, *Philonous*, in some sort there is. For example, when I look on a picture, or statue of *Julius Cæsar*, I may be said, after a manner, to perceive him (tho' not immediately) by my senses.

Phil. It seems then, you will have our ideas, which alone are immediately perceived, to be pictures of external things: and that these also, are perceived by sense, inasmuch as they have a conformity or resemblance to our ideas.

Hyl. That is my meaning.

Phil. And, in the same way that *Julius Cæsar*, in himself invisible, is nevertheless perceived by sight; real things, in themselves imperceptible, are perceived by sense.

Hyl. In the very same.

Phil. Tell me, *Hylas*, when you behold the picture of *Julius Cæsar*, do you see with your eyes any more than some colours and figures, with a certain symmetry and composition of the whole?

Hyl. Nothing else.

Phil. And wou'd not a man, who had never known anything of *Julius Cæsar*, see as much?

Hyl. He wou'd.

Phil. Consequently, he hath his sight, and the use of it, in as perfect a degree as you.

Hyl. I agree with you.

Phil. Whence comes it then, that your thoughts are directed to the *Roman* emperor, and his are not? This cannot proceed from the sensations or ideas of sense, by you then perceived; since you acknowledge you have no advantage over him in that respect. It should seem, therefore, to proceed from reason and memory: shou'd it not?

Hyl. It shou'd.

Phil. Consequently, it will not follow from that instance, that anything is perceived by sense, which is not immediately perceived. Tho' I grant, we may, in one acceptation, be said to perceive sensible things mediately by sense: that is, when, from a frequently perceived connexion, the mediate perception of ideas by one sense, suggests to the mind others, perhaps belonging to another sense, which are wont to be connected with them. For instance, when I

hear a coach drive along the streets, immediately I perceive only the sound; but from the experience I have had, that such a sound is connected with a coach, I am said to hear the coach. It is, nevertheless, evident that, in truth and strictness, nothing can be *heard* but *sound*: and the coach is not then properly perceived by sense, but suggested from experience. So likewise, when we are said to see a red-hot bar of iron; the solidity and heat of the iron are not the objects of sight, but suggested to the imagination by the colour and figure, which are properly perceived by that sense. In short, those things alone are actually and strictly perceived by any sense, which would have been perceived, in case that same sense had then been first conferred on us. As for other things, it is plain, they are only suggested to the mind by experience, grounded on former perceptions. But, to return to your comparison of *Cæsar's* picture, it is plain, if you keep to that, you must hold, the real things, or archetypes of our ideas, are not perceived by sense, but by some internal faculty of the soul, as reason, or memory. I wou'd, therefore, fain know, what arguments you can draw from reason, for the existence of what you call *real things* or *material objects*. Or, whether you remember to have seen them formerly, as they are in themselves; or, if you have heard or read of any one that did.

Hyl. I see, *Philonous*, you are disposed to raillery; but that will never convince me.

Phil. My aim is only to learn from you, the way to come at the knowledge of *material beings*. Whatever we perceive, is perceived immediately, or mediately: by sense, or by reason and reflection. But, as you have excluded sense, pray, shew me what reason you have to believe their existence; or, what *medium* you can possibly make use of, to prove it either to mine, or your own understanding.

Hyl. To deal ingenuously, *Philonous*, now I consider the point, I do not find I can give you any good reason for it. But, thus much seems pretty plain, that it is at least possible such things may really exist. And as long as there is no absurdity in supposing them, I am resolved to believe as I did, till you bring good reasons to the contrary.

Phil. What! Is it come to this, that you only believe the existence of material objects, and that your belief is founded barely on the possibility of its being true? Then you will have me bring

reasons against it: tho' another would think it reasonable, the proof should lie on him, who holds the affirmative. And after all, this very point which you are now resolved to maintain, without any reason, is, in effect, what you have, more than once, during this discourse, seen good reason to give up. But to pass over all this; if I understand you rightly, you say, our ideas do not exist without the mind; but that they are copies, images, or representations of certain originals, that do.

Hyl. You take me right.

Phil. They are then like external things.

Hyl. They are.

Phil. Have those things a stable and permanent nature, independent of our senses; or are they in a perpetual change, upon our producing any motions in our bodies, suspending, exerting, or altering, our faculties or organs of sense.

Hyl. Real things, it is plain, have a fixed and real nature, which remains the same, notwithstanding any change in our senses, or in the posture and motion of our bodies; which, indeed, may affect the ideas in our minds, but it were absurd to think they had the same effect on things existing without the mind.

Phil. How then is it possible, that things perpetually fleeting and variable, as our ideas, should be copies or images of anything fixed and constant? Or, in other words, since all sensible qualities, as size, figure, colour, &c. *i.e.* our ideas, are continually changing upon every alteration in the distance, medium, or instruments of sensation; how can any determinate material object be properly represented or painted forth by several distinct things, each of which is so different from and unlike the rest? Or, if you say, it resembles some one only of our ideas, how shall we be able to distinguish the true copy from all the false ones?

Hyl. I profess, *Philonous*, I am at a loss. I know not what to say to this.

Phil. But neither is this all. Which are material objects in themselves, perceptible or imperceptible?

Hyl. Properly and immediately nothing can be perceived but ideas. All material things, therefore, are in themselves insensible, and to be perceived only by our ideas.

Phil. Ideas then are sensible, and their archetypes or originals insensible.

Hyl. Right.

Phil. But how can that which is sensible be like that which is insensible? Can a real thing, in itself *invisible*, be like a *colour*; or a real thing which is not *audible*, be like a *sound*? In a word; can any thing be like a sensation or idea, but another sensation or idea?

Hyl. I must own, I think not.

Phil. Is it possible there should be any doubt in the point? Do you not perfectly know your own ideas?

Hyl. I know them perfectly; since what I do not perceive, or know, can be no part of my idea.

Phil. Consider, therefore, and examine them, and then tell me if there be any thing in them which can exist without the mind: or if you can conceive anything like them existing without the mind.

Hyl. Upon inquiry, I find it is impossible for me to conceive or understand how anything but an idea can be like an idea. And it is most evident, that *no idea can exist without the mind*.

Phil. You are, therefore, by your principles, forced to deny the reality of sensible things, since you made it to consist in an absolute existence, exterior to the mind. That is to say, you are a downright *sceptic*. So I have gained my point, which was to shew, your principles led to scepticism.

Hyl. For the present I am, if not intirely convinced, at least silenced.

Phil. I wou'd fain know what more you wou'd require in order to a perfect conviction. Have you not had the liberty of explaining yourself all manner of ways? Were any little slips in discourse laid hold and insisted on? Or were you not allowed to retract or reinforce anything you had offered, as best served your purpose? Has not every thing you could say been heard and examined with all the fairness imaginable? In a word, have you not in every point been convinced out of your own mouth? And if you can at present discover any flaw in any of your former concessions, or think of any remaining subterfuge, any new distinction, colour, or comment whatsoever, why do you not produce it?

Hyl. A little patience, *Philonous*. I am at present so amazed to see myself ensnared, and as it were imprisoned, in the labyrinths you have drawn me into, that on the suddain it cannot be expected

I should find my way out. You must give me time to look about me, and recollect myself.

Phil. Hark; is not this the college bell?

Hyl. It rings for prayers.

Phil. We will go in then, if you please, and meet here again to-morrow morning. In the meantime, you may employ your thoughts on this morning's discourse, and try if you can find any fallacy in it, or invent any new means to extricate yourself.

Hyl. Agreed.

THE SECOND DIALOGUE

Hylas. I beg your pardon, *Philonous*, for not meeting you sooner. All this morning my head was so filled with our late conversation, that I had not leisure to think of the time of the day, or, indeed, of anything else.

Philonous. I am glad you were so intent upon it, in hopes if there were any mistakes in your concessions, or fallacies in my reasonings from them, you will now discover them to me.

Hyl. I assure you, I have done nothing ever since I saw you, but search after mistakes and fallacies, and with that view have minutely examined the whole series of yesterday's discourse: but all in vain, for the notions it led me into, upon review, appear still more clear and evident; and the more I consider them, the more irresistibly do they force my assent.

Phil. And is not this, think you, a sign that they are genuine, that they proceed from nature, and are conformable to right reason? Truth and beauty are in this alike, that the nicest survey sets them both off to advantage. Whilst the false lustre of error and disguise cannot endure being review'd, or too nearly inspected.

Hyl. I own there is a great deal in what you say. Nor can any one be more intirely satisfied of the truth of those od consequences, so long as I have in view the reasonings that lead to them. But when these are out of my thoughts, there seems, on the other hand, something so satisfactory, so natural and intelligible in the modern way of explaining things, that I profess I know not how to reject it.

Phil. I know not what way you mean.

Hyl. I mean the way of accounting for our sensations or ideas.

Phil. How is that?

Hyl. It is supposed the soul makes her residence in some part

of the brain, from which the nerves take their rise, and are thence extended to all parts of the body. And that outward objects, by the different impressions they make on the organs of sense, communicate certain vibrative motions to the nerves and these being filled with spirits propagate them to the brain or seat of the soul, which, according to the various impressions or traces thereby made in the brain, is variously affected with ideas.

Phil. And call you this an explication of the manner whereby we are affected with ideas?

Hyl. Why not, *Philonous*, have you anything to object against it?

Phil. I wou'd first know whether I rightly understand your hypothesis. You make certain traces in the brain to be the causes or occasions of our ideas. Pray tell me whether by the *brain* you mean any sensible thing.

Hyl. What else think you I cou'd mean?

Phil. Sensible things are all immediately perceivable; and those things which are immediately perceivable, are ideas; and these exist only in the mind. Thus much you have, if I mistake not, long since agreed to.

Hyl. I do not deny it.

Phil. The brain, therefore, you speak of, being a sensible thing, exists only in the mind. Now, I wou'd fain know whether you think it reasonable to suppose, that one idea or thing existing in the mind, occasions all other ideas. And if you think so, pray how do you account for the origine of that primary idea or brain itself?

Hyl. I do not explain the origine of our ideas by that brain which is perceivable to sense, this being itself only a combination of sensible ideas, but by another which I imagine.

Phil. But are not things imagined as truly in the mind as things perceived?

Hyl. I must confess they are.

Phil. It comes therefore to the same thing; and you have been all this while accounting for ideas, by certain motions or impressions of the brain, that is, by some alterations in an idea, whether sensible or imaginable, it matters not.

Hyl. I begin to suspect my hypothesis.

Phil. Besides spirits, all that we know or conceive, are our own ideas. When, therefore, you say, all ideas are occasioned by im-

pressions, in the brain, do you conceive this brain or no? If you do, then you talk of ideas imprinted in an idea, causing that same idea, which is absurd. If you do not conceive it, you talk unintelligibly, instead of forming a reasonable hypothesis.

Hyl. I now clearly see it was a meer dream. There is nothing in it.

Phil. You need not be much concerned at it; for, after all, this way of explaining things, as you called it, could never have satisfied any reasonable man. What connexion is there between a motion in the nerves, and the sensations of sound or colour in the mind? or how is it possible these should be the effect of that?

Hyl. But I cou'd never think it had so little in it, as now it seems to have.

Phil. Well then, are you at length satisfied that no sensible things have a real existence; and that you are in truth an arrant *sceptic*?

Hyl. It is too plain to be denied.

Phil. Look! are not the fields covered with a delightful verdure? Is there not something in the woods and groves, in the rivers and clear springs, that soothes, that delights, that transports the soul? At the prospect of the wide and deep ocean, or some huge mountain whose top is lost in the clouds, or of an old gloomy forest, are not our minds filled with a pleasing horror? Even in rocks and deserts is there not an agreeable wildness? How sincere a pleasure is it to behold the natural beauties of the earth! To preserve and renew our relish for them, is not the veil of night alternately drawn over her face, and doth she not change her dress with the seasons? How aptly are the elements disposed? What variety and use in stones and minerals? What delicacy, what beauty, what contrivance, in animal and vegetable bodies? How exquisitely are all things suited, as well to their particular ends, as to constitute apposite parts of the whole! And while they mutually aid and support, do they not also set off and illustrate each other? Raise now your thoughts from this ball of earth, to all those glorious luminaries that adorn the high arch of heaven. The motion and situation of the planets, are they not admirable for use and order? Were those (miscalled *erratique*) globes once known to stray, in their repeated journeys thorow the pathless void? Do they not measure areas round the sun, ever proportioned to the times? So fixed, so im-

mutable are the laws by which the unseen author of nature actuates the universe. How vivid and radiant is the lustre of the fixed stars! How magnificent and rich that negligent profusion, with which they appear to be scattered throughout the whole azure vault! Yet, if you take the telescope, it brings into your sight a new host of stars that escape the naked eye. Here they seem contiguous and minute, but, to a nearer view, immense orbs of light at various distances, far sunk in the abyss of space. Now, you must call imagination to your aid. The feeble, narrow sense, cannot descry innumerable worlds revolving round the central fires; and, in those worlds, the energy of an all-perfect mind display'd in endless forms. But, neither sense nor imagination are big enough, to comprehend the boundless extent, with all its dazzling furniture. Tho' the labouring mind exert and strain each power to its utmost reach, there still stands out ungrasped, a surplusage immeasurable. Yet all the vast bodies that compose this mighty frame, how distant and remote soever, are by some secret mechanism, some divine art and force, linked in a mutual dependence and intercourse with each other, even with this earth, which almost slipt from my thoughts, and was lost in the croud of worlds. Is not the whole system immense, beautiful, glorious beyond expression and beyond thought! What treatment then do those philosophers deserve, who wou'd deprive these noble and delightful scenes of all reality? How shou'd those principles be entertained, that lead us to think all the visible beauty of the creation a false imaginary glare? To be plain, can you expect this scepticism of yours will not be thought extravagantly absurd by all men of sense?

Hyl. Other men may think as they please: but for your part you have nothing to reproach me with. My comfort is, you are as much a *sceptic* as I am.

Phil. There, *Hylas*, I must beg leave to differ from you.

Hyl. What! have you all along agreed to the premises, and do you now deny the conclusion, and leave me to maintain those paradoxes by myself which you led me into? This surely is not fair.

Phil. I deny that I agreed with you in those notions that led to scepticism. You indeed said the reality of sensible things consisted in an *absolute existence* out of the minds of spirits, or distinct from their being perceived. And pursuant to this notion of

reality, you are obliged to deny sensible things any real existence: that is, according to your own definition, you profess yourself a *sceptic*. But I neither said nor thought, the reality of sensible things was to be defined after that manner. To me it is evident, for the reasons you allow of, that sensible things cannot exist otherwise than in a mind or spirit. Whence I conclude, not that they have no real existence, but that, seeing they depend not on my thought, and have an existence distinct from being perceived by me, *there must be some other mind wherein they exist*. As sure, therefore, as the sensible world really exists, so sure is there an infinite omnipresent spirit, who contains and supports it.

Hyl. What! this is no more than I and all Christians hold; nay, and all others too who believe there is a God, and that He knows and comprehends all things.

Phil. Aye, but here lies the difference. Men commonly believe that all things are known or perceived by God, because they believe the being of a God; whereas I, on the other side, immediately and necessarily conclude the being of a God, because all sensible things must be perceived by him.

Hyl. But so long as we all believe the same thing, what matter is it how we come by that belief?

Phil. But neither do we agree in the same opinion. For philosophers, tho' they acknowledge all corporeal beings to be perceived by God, yet they attribute to them an absolute subsistence distinct from their being perceived by any mind whatever, which I do not. Besides, is there no difference between saying, *There is a God, therefore He perceives all things*: and saying, *Sensible things do really exist: and, if they really exist, they are necessarily perceived by an infinite mind: therefore there is an infinite mind, or God*. This furnishes you with a direct and immediate demonstration, from a most evident principle, of the *being of a God*. Divines and philosophers had proved, beyond all controversy, from the beauty and usefulness of the several parts of the creation, that it was the workmanship of God. But that setting aside all help of astronomy and natural philosophy, all contemplation of the contrivance, order and adjustment of things, an infinite mind should be necessarily inferred from the bare existence of the sensible world, is an advantage peculiar to them only who have made this easy reflexion: that the sensible world is that which we perceive by our several

senses; and that nothing is perceived by the senses beside ideas; and that no idea or archetype of an idea, can exist otherwise than in a mind. You may now, without any laborious search into the sciences, without any subtilty of reason, or tedious length of discourse, oppose and baffle the most strenuous advocate for Atheism. Those miserable refuges, whether in an eternal succession of unthinking causes and effects, or in a fortuitous concourse of atoms; those wild imaginations of Vanini, Hobbes, and Spinoza; in a word, the whole system of atheism, is it not entirely overthrown, by this single reflexion on the repugnancy included in supposing the whole, or any part, even the most rude and shapeless, of the visible world, to exist without a mind? Let any one of those abettors of impiety but look into his own thoughts, and there try if he can conceive how so much as a rock, a desert, a chaos, or confused jumble of atoms; how anything at all, either sensible or imaginable, can exist independent of a mind, and he need go no farther to be convinced of his folly. Can any thing be fairer than to put a dispute on such an issue, and leave it to a man himself to see if he can conceive, even in thought, what he holds to be true in fact, and from a notional to allow it a real existence?

Hyl. It cannot be denied, there is something highly serviceable to religion in what you advance. But do you not think it looks very like a notion entertained by some eminent moderns, of *seeing all things in God*.

Phil. I would gladly know that opinion; pray explain it to me.

Hyl. They conceive that the soul, being immaterial, is incapable of being united with material things, so as to perceive them in themselves, but that she perceives them by her union with the substance of God, which, being spiritual, is therefore purely intelligible, or capable of being the immediate object of a spirit's thought. Besides, the divine essence contains in it perfections correspondent to each created being; and which are, for that reason, proper to exhibit or represent them to the mind.

Phil. I do not understand how our ideas, which are things altogether passive and inert, can be the essence, or any part (or like any part) of the essence or substance of God, who is an impassive, indivisible, purely active being. Many more difficulties and objections there are which occur at first view against this hypothesis; but I shall only add that it is liable to all the absurdities of the

common hypotheses, in making a created world exist otherwise than in the mind of a spirit. Beside all which it hath this peculiar to itself; that it makes that material world serve to no purpose. And if it pass for a good argument against other hypotheses in the sciences, that they suppose nature or the divine wisdom to make something in vain, or do that by tedious round-about methods, which might have been performed in a much more easy and compendious way, what shall we think of that hypothesis which supposes the whole world made in vain?

Hyl. But what say you, are not you too of opinion that we see all things in God? If I mistake not, what you advance comes near it.

*Phil.*⁶ I intirely agree with what the holy Scripture saith, *That in God we live and move and have our being*. But that we see things in His essence, after the manner above set forth, I am far from believing. Take here in brief my meaning. It is evident that the things I perceive are my own ideas, and that no idea can exist, unless it be in a mind. Nor is it less plain that these ideas or things by me perceived, either themselves or their archetypes exist independently of my mind, since I know myself not to be their author, it being out of my power to determine at pleasure, what particular ideas I shall be affected with upon opening my eyes or ears. They must therefore exist in some other mind, whose will it is they should be exhibited to me. The things, I say, immediately perceived are ideas or sensations, call them which you will. But how can any idea or sensation exist in, or be produced by, anything but a mind or spirit? This indeed is inconceivable: and to assert that which is inconceivable is to talk nonsense: is it not?

⁶ The following was added at the beginning of this paragraph in the third edition:

"Few men think, yet all have opinions. Hence men's opinions are superficial and confused. It is nothing strange that tenets, which in themselves are ever so different, should nevertheless be confounded with each other by those who do not consider them attentively. I shall not therefore be surprised if some men imagine that I run into the enthusiasm of Malebranche; though in truth I am very remote from it. He builds on the most abstract general ideas, which I entirely disclaim. He asserts an absolute external world, which I deny. He maintains that we are deceived by our senses, and know not the real natures or the true forms and figures of extended beings; of all which I hold the direct contrary. So that upon the whole there are no principles more fundamentally opposite than his and mine. It must be owned that, I intirely agree, etc. . . ."

Hyl. Without doubt.

Phil. But, on the other hand, it is very conceivable that they should exist in, and be produced by, a Spirit; since this is no more than I daily experience in myself, inasmuch as I perceive numberless ideas; and, by an act of my will, can form a great variety of them, and raise them up in my imagination: though, it must be confessed, these creatures of the fancy are not altogether so distinct, so strong, vivid, and permanent, as those perceived by my senses, which latter are called *real things*. From all which I conclude, *there is a mind which affects me every moment with all the sensible impressions I perceive*. And, from the variety, order, and manner of these, I conclude the author of them to be *wise, powerful, and good, beyond comprehension*. Mark it well; I do not say, I see things by perceiving that which represents them in the intelligible substance of God. This I do not understand; but I say, the things by me perceived are known by the understanding, and produced by the will, of an infinite spirit. And is not all this most plain and evident? Is there any more in it than what a little observation of our own minds, and that which passes in them, not only enables us to conceive, but also obliges us to acknowledge?

Hyl. I think I understand you very clearly; and own the proof you give of a Deity seems no less evident, than it is surprizing. But allowing that God is the supreme and universal cause of all things, yet may there not still be a third nature besides spirits and ideas? May we not admit a subordinate and limited cause of our ideas? In a word, may there not for all that be *matter*?

Phil. How often must I inculcate the same thing? You allow the things immediately perceived by sense to exist nowhere without the mind: but there is nothing perceived by sense, which is not perceived immediately: therefore there is nothing sensible that exists without the mind. The matter, therefore, which you still insist on, is something intelligible, I suppose; something that may be discovered by reason, and not by sense.

Hyl. You are in the right.

Phil. Pray let me know what reasoning your belief of matter is grounded on; and what this matter is in your present sense of it.

Hyl. I find myself affected with various ideas, whereof, I know, I am not the cause; neither are they the cause of themselves, or of one another, or capable of subsisting by themselves, as being alto-

gether inactive, fleeting, dependent beings. They have, therefore, some cause distinct from me and them: of which I pretend to know no more, than that it is *the cause of my ideas*. And this thing, whatever it be, I call matter.

Phil. Tell me, *Hylas*, has every one a liberty to change the current, proper signification attached to a common name in any language? For example, suppose a traveller shou'd tell you, that in a certain country men pass unhurt thorow the fire; and, upon explaining himself, you found he meant by the word *fire* that which others call *water*: or, if he should assert that there are trees that walk upon two legs, meaning men by the term *trees*. Wou'd you think this reasonable?

Hyl. No, I shou'd think it very absurd. Common custom is the standard of propriety in language. And for any man to affect speaking improperly, is to pervert the use of speech, and can never serve to a better purpose, than to protract and multiply disputes where there is no difference in opinion.

Phil. And doth not *matter*, in the common current acceptation of the word, signify an extended, solid, movable, unthinking, inactive substance?

Hyl. It doth.

Phil. And has it not been made evident that no such substance can possibly exist? And tho' it should be allowed to exist, yet how can that which is *inactive* be a *cause*; or that which is unthinking be a *cause of thought*? You may, indeed, if you please, annex to the word *matter* a contrary meaning to what is vulgarly received; and tell me, you understand by it an unextended, thinking, active being, which is the cause of our ideas. But what else is this, than to play with words, and run into that very fault you just now condemned with so much reason? I do by no means find fault with your reasoning, in that you collect a cause from the *phenomena*. But I deny, that the cause deducible by reason, can properly be termed *matter*.

Hyl. There is, indeed, something in what you say. But I am afraid, you do not thorowly comprehend my meaning. I wou'd by no means be thought to deny, that God, or an infinite spirit, is the supreme cause of all things. All I contend for, is, that, subordinate to the supreme agent, there is a cause of a limited and inferior nature, which concur in the production of our ideas, not by any

act of will, or spiritual efficiency, but by that kind of action which belongs to matter, *viz. motion*.

Phil. I find, you are at every turn relapsing into your old exploded conceit, of a moveable, and, consequently, an extended, substance existing without the mind. What! have you already forgot you were convinced, or are you willing I should repeat what has been said on that head? In truth, this is not fair dealing in you, still to suppose the being of that which you have so often acknowledged to have no being. But, not to insist farther on what has been so largely handled, I ask, whether all your ideas are not perfectly passive and inert, including nothing of action in them?

Hyl. They are.

Phil. And are sensible qualities anything else but ideas?

Hyl. How often have I acknowledged that they are not?

Phil. But is not motion a sensible quality?

Hyl. It is.

Phil. Consequently, it is no action.

Hyl. I agree with you. And, indeed, it is very plain, that when I stir my finger, it remains passive; but my will, which produced the motion, is active.

Phil. Now I desire to know, in the first place, whether motion being allowed to be no action, you can conceive any action besides volition: and in the second place, whether to say something, and conceive nothing, be not to talk nonsense: and, lastly whether having considered the premises you do not perceive, that to suppose any efficient or active cause of our ideas, other than *spirit*, is highly absurd and unreasonable?

Hyl. I give up the point intirely. But, tho' matter may not be a cause, yet what hinders its being an *instrument* subservient to the supreme agent in the production of our ideas?

Phil. An instrument, say you; pray, what may be the figure, springs, wheels, and motions of that instrument?

Hyl. Those I pretend to determine nothing of, both the substance and its qualities being intirely unknown to me.

Phil. What? You are then of opinion, it is made up of unknown parts, that it hath unknown motions and an unknown shape.

Hyl. I do not believe that it hath any figure or motion at all, being already convinced, that no sensible qualities can exist in an unperceiving substance.

Phil. But what notion is it possible to frame of an instrument void of all sensible qualities, even extension itself?

Hyl. I do not pretend to have any notion of it.

Phil. And what reason have you to think, this unknown, this inconceivable somewhat doth exist? Is it that you imagine, God cannot act as well without it, or that you find by experience, the use of some such thing, when you form ideas in your own mind?

Hyl. You are always teizing me for reasons of my belief. Pray, what reasons have you not to believe it?

Phil. It is to me a sufficient reason not to believe the existence of anything, if I see no reason for believing it. But, not to insist on reasons for believing, you will not so much as let me know what it is you wou'd have me believe; since you say, you have no manner of notion of it. After all, let me intreat you to consider, whether it be like a philosopher, or even like a man of common sense, to pretend to believe, you know not what, and you know not why.

Hyl. Hold, *Philonous*. When I tell you matter is an *instrument*, I do not mean altogether nothing. It is true, I know not the particular kind of instrument; but, however, I have some notion of *instrument in general*, which I apply to it.

Phil. But what if it shou'd prove that there is something, even in the most general notion of *instrument*, as taken in a distinct sense from *cause*, which makes the use of it inconsistent with the divine attributes?

Hyl. Make that appear, and I shall give up the point.

Phil. What mean you by the general nature or notion of *instrument*?

Hyl. That which is common to all particular instruments composeth the general notion.

Phil. Is it not common to all instruments, that they are applied to the doing those things only which cannot be performed by the meer act of our wills. Thus, for instance, I never use an instrument to move my finger, because it is done by a volition. But I shou'd use one, if I were to remove part of a rock, or tear up a tree by the roots. Are you of the same mind? or, can you shew any example where an instrument is made use of, in producing an effect immediately depending on the will of the agent?

Hyl. I own, I cannot.

Phil. How, therefore, can you suppose, that an all-perfect spirit,

on whose will all things have an absolute and immediate dependence, shou'd need an instrument in his operations, or, not needing it, make use of it? Thus, it seems to me, that you are obliged to own the use of a lifeless, inactive instrument, to be incompatible with the infinite perfection of God; that is, by your own confession, to give up the point.

Hyl. It doth not readily occur what I can answer you.

Phil. But methinks you shou'd be ready to own the truth, when it has been fairly proved to you. We indeed, who are beings of finite powers, are forced to make use of instruments. And the use of an instrument sheweth, the agent to be limited by rules of another's prescription, and that he cannot obtain his end, but in such a way, and by such conditions. Whence it seems a clear consequence, that the supreme, unlimited agent, useth no tool or instrument at all. The will of an omnipotent spirit is no sooner exerted than executed, without the application of means, which, if they are employed by inferior agents, it is not upon account of any real efficacy that is in them, or necessary aptitude to produce any effect, but meerly in compliance with the laws of nature, or those conditions prescribed to them by the first cause, who is himself above all limitation or prescription whatsoever.

Hyl. I will no longer maintain, that matter is an instrument. However, I wou'd not be understood to give up its existence neither; since, notwithstanding what hath been said, it may still be an *occasion*.

Phil. How many shapes is your matter to take? or, how often must it be proved not to exist, before you are content to part with it? But, to say no more of this (tho' by all the laws of disputation, I may justly blame you, for so frequently changing the signification of the principal term) I wou'd fain know what you mean by affirming, that matter is an occasion, having already denied it to be a cause. And when you have shewn in what sense you understand *occasion*, pray, in the next place, be pleased to shew me what reason induceth you to believe, there is such an occasion of our ideas.

Hyl. As to the first point: by *occasion*, I mean an inactive, unthinking being; at the presence whereof, God excites ideas in our minds.

Phil. And what may be the nature of that inactive, unthinking being?

Hyl. I know nothing of its nature.

Phil. Proceed then to the second point, and assign some reason why we should allow an existence to this inactive, unthinking, unknown thing.

Hyl. When we see ideas produced in our minds after an orderly and constant manner, it is natural to think they have some fixed and regular occasions, at the presence of which they are excited.

Phil. You acknowledge then God alone to be the cause of our ideas, and that He causes them at the presence of those occasions.

Hyl. That is my opinion.

Phil. Those things which you say are present to God, without doubt He perceives.

Hyl. Certainly; otherwise they could not be to Him an occasion of acting.

Phil. Not to insist now on your making sense of this hypothesis, or answering all the puzzling questions and difficulties it is liable to: I only ask whether the order and regularity observable in the series of our ideas, or the course of nature, be not sufficiently accounted for by the wisdom and power of God; and whether it does not derogate from those attributes, to suppose He is influenced, directed, or put in mind, when and what He is to act, by any unthinking substance? And, lastly, whether, in case I granted all you contend for, it wou'd make any thing to your purpose, it not being easy to conceive, how the external or absolute existence of an unthinking substance, distinct from its being perceived, can be inferred from my allowing that there are certain things perceived by the mind of God, which are to Him the occasion of producing ideas in us.

Hyl. I am perfectly at a loss what to think, this notion of *occasion* seeming now altogether as groundless as the rest.

Phil. Do you not at length perceive, that in all these different acceptations of *matter*, you have been only supposing you know not what, for no manner of reason, and to no kind of use?

Hyl. I freely own myself less fond of my notions, since they have been so accurately examined. But still, methinks, I have some confused perception that there is such a thing as *matter*.

Phil. Either you perceive the being of matter immediately, or mediately. If immediately, pray inform me by which of the senses you perceive it. If mediately, let me know by what reasoning it

is inferred from those things which you perceive immediately. So much for the perception. Then for the matter itself, I ask whether it is object, *substratum*, cause, instrument, or occasion? You have already pleaded for each of these, shifting your notions, and making matter to appear sometimes in one shape, then in another. And what you have offered, has been disapproved and rejected by yourself. If you have any thing new to advance, I wou'd gladly hear it.

Hyl. I think I have already offered all I had to say on those heads. I am at a loss what more to urge.

Phil. And yet you are loath to part with your old prejudice. But to make you quit it more easily, I desire that, beside what has been hitherto suggested, you will farther consider, whether upon supposition that matter exists, you can possibly conceive how you should be affected by it? Or supposing it did not exist, whether it be not evident, you might for all that be affected with the same ideas you now are, and consequently have the very same reasons to believe its existence that you now can have?

Hyl. I acknowledge it is possible we might perceive all things just as we do now, tho' there was no matter in the world; neither can I conceive, if there be matter, how it shou'd produce any idea in our minds. And, I do farther grant, you have intirely satisfied me that it is impossible there shou'd be such a thing as matter in any of the foregoing acceptations. But still I cannot help supposing that there is *matter* in some sense or other. What that is I do not indeed pretend to determine.

Phil. I do not expect you shou'd define exactly the nature of that unknown being. Only be pleased to tell me, whether it is a substance: and if so, whether you can suppose a substance without accidents; or, in case you suppose it to have accidents or qualities, I desire you will let me know what those qualities are, at least, what is meant by matter's supporting them?

Hyl. We have already argued on those points. I have no more to say to them. But, to prevent any farther questions, let me tell you, I at present understand by *matter* neither substance nor accident, thinking nor extended being, neither cause, instrument, nor occasion, but something intirely unknown, distinct from all these.

Phil. It seems then, you include in your present notion of matter, nothing but the general abstract idea of *entity*.

Hyl. Nothing else, save only that I superadd to this general

idea, the negation of all those particular things, qualities, or ideas, that I perceive, imagine, or in any wise apprehend.

Phil. Pray where do you suppose this unknown matter to exist?

Hyl. Oh *Philonous*! now you think you have entangled me, for if I say it exists in place, then you will infer that it exists in the mind, since it is agreed, that place or extension exists only in the mind: but I am not ashamed to own my ignorance. I know not where it exists; only I am sure it exists not in place. There is a negative answer for you: and you must expect no other to all the questions you put for the future about matter.

Phil. Since you will not tell me where it exists, be pleased to inform me after what manner you suppose it to exist, or what you mean by its *existence*.

Hyl. It neither thinks nor acts, neither perceives nor is perceived.

Phil. But, what is there positive in your abstracted notion of its existence?

Hyl. Upon a nice observation, I do not find I have any positive notion or meaning at all. I tell you again, I am not ashamed to own my ignorance. I know not what is meant by its *existence*, or how it exists.

Phil. Continue, good *Hylas*, to act the same ingenuous part, and tell me sincerely, whether you can frame a distinct idea of entity in general, prescinded from and exclusive of all thinking and corporeal beings, all particular things whatsoever.

Hyl. Hold, let me think a little—I profess, *Philonous*, I do not find that I can. At first glance methought I had some dilute and airy notion of pure entity in abstract; but upon closer attention it hath quite vanished out of sight. The more I think on it, the more am I confirmed in my prudent resolution of giving none but negative answers, and not pretending to the least degree of any positive knowledge or conception of matter, its *where*, its *how*, its *entity*, or any thing belonging to it.

Phil. When, therefore, you speak of the existence of matter, you have not any notion in your mind.

Hyl. None at all.

Phil. Pray tell me if the case stands not thus: at first, from a belief of material substance, you would have it that the immediate objects existed without the mind; then that their archetypes;

then causes; next instruments; then occasions: lastly, *something in general*, which being interpreted proves *nothing*. So matter comes to nothing. What think you, *Hylas*, is not this a fair summary of your whole proceeding.

Hyl. Be that as it will, yet I still insist upon it, that our not being able to conceive a thing, is no argument against its existence.

Phil. That from a cause, effect, operation, sign, or other circumstance, there may reasonably be inferred the existence of a thing not immediately perceived, and that it were absurd for any man to argue against the existence of that thing, from his having no direct and positive notion of it, I freely own. But where there is nothing of all this; where neither reason nor revelation induceth us to believe the existence of a thing; where we have not even a relative notion of it; where an abstraction is made from perceiving, and being perceived, from spirit and idea: in fine, where there is not so much as the most inadequate or faint idea pretended to. I will not, indeed, thence conclude against the reality of any notion, or existence of any thing; but my inference shall be, that you mean nothing at all: that you employ words to no manner of purpose, without any design or signification whatsoever. And I leave it to you to consider how meer jargon should be treated.

Hyl. To deal frankly with you, *Philonous*, your arguments seem in themselves unanswerable, but they have not so great an effect on me, as to produce that intire conviction, that hearty acquiescence which attends demonstration. I find myself still relapsing into an obscure surmise of, I know not what, *matter*.

Phil. But are you not sensible, *Hylas*, that two things must concur to take away all scruple, and work a plenary assent in the mind? Let a visible object be set in never so clear a light, yet if there is any imperfection in the sight, or if the eye is not directed towards it, it will not be distinctly seen. And, tho' a demonstration be never so well grounded and fairly proposed, yet if there is withal a stain of prejudice, or a wrong biass on the understanding, can it be expected on a sudden to perceive clearly, and adhere firmly to the truth? No, there is need of time and pains: the attention must be awakened and detained by a frequent repetition of the same thing placed oft in the same, oft in different lights. I have said it already, and find I must still repeat and inculcate, that it is an unaccountable licence you take, in pretending to maintain

you know not what, for you know not what reason, to you know not what purpose? Can this be paralleled in any art or science, any sect or profession of men? Or is there anything so barefacedly groundless and unreasonable to be met with, even in the lowest of common conversation? But perhaps you will still say matter may exist, tho' at the same time you neither know what is meant by *matter*, or by its *existence*. This indeed is surprizing, and the more so, because it is altogether voluntary and of your own head, you not being led to it by any one reason, for I challenge you to shew me that thing in nature, which needs matter to explain or account for it.

Hyl. The reality of things cannot be maintained without supposing the existence of matter. And is not this, think you, a good reason why I shou'd be earnest in its defence?

Phil. The reality of things! What things, sensible or intelligible?

Hyl. Sensible things.

Phil. My glove, for example?

Hyl. That, or any other thing perceived by the senses.

Phil. But to fix on some particular thing; is it not a sufficient evidence to me of the existence of this *glove*, that I see it, and feel it, and wear it? Or, if this will not do, how is it possible I shou'd be assured of the reality of this thing, which I actually see in this place, by supposing that some unknown thing, which I never did or can see, exists after an unknown manner, in an unknown place, or in no place at all? How can the supposed reality of that which is intangible be a proof that anything tangible really exists? or, of that which is invisible, that any visible thing, or, in general, of anything which is imperceptible, that a perceptible exists? Do but explain this, and I shall think nothing too hard for you.

Hyl. Upon the whole, I am content to own the existence of matter is highly improbable; but the direct and absolute impossibility of it does not appear to me.

Phil. But granting matter to be possible, yet, upon that account meerly, it can have no more claim to existence than a golden mountain, or a centaur.

Hyl. I acknowledge it; but still you do not deny it is possible; and that which is possible, for aught you know, may actually exist.

Phil. I deny it to be possible: and have, if I mistake not, evi-

dently proved, from your own concessions, that it is not. In the common sense of the word *matter*, is there any more implied than an extended, solid, figured, moveable substance existing without the mind? And, have not you acknowledged, over and over, that you have seen evident reason for denying the possibility of such a substance?

Hyl. True, but that is only one sense of the term *matter*.

Phil. But, is it not the only proper, genuine, received sense? And if matter in such a sense be proved impossible, may it not be thought, with good grounds, absolutely impossible? Else, how cou'd anything be proved impossible? Or, indeed, how cou'd there be any proof at all one way or other, to a man who takes the liberty to unsettle and change the common signification of words?

Hyl. I thought philosophers might be allowed to speak more accurately than the vulgar, and were not always confined to the common acceptation of a term.

Phil. But this now mentioned is the common received sense among philosophers themselves. But not to insist on that, have you not been allowed to take matter in what sense you pleased? And have you not used this privilege in the utmost extent, sometimes intirely changing, at others leaving out, or putting into the definition of it whatever, for the present, best served your design, contrary to all the known rules of reason and logic? And hath not this shifting, unfair method of yours, spun out our dispute to an unnecessary length; matter having been particularly examined, and, by your own confession, refuted in each of those senses? And can any more be required, to prove the absolute impossibility of a thing, than the proving it impossible in every particular sense, that either you, or any one else, understands it in?

Hyl. But I am not so thorowly satisfied that you have proved the impossibility of matter, in the last most obscure, abstracted, and indefinite sense.

Phil. When is a thing shewn to be impossible?

Hyl. When a repugnancy is demonstrated between the ideas comprehended in its definition.

Phil. But where there are no ideas, there no repugnancy can be demonstrated between ideas.

Hyl. I agree with you.

Phil. Now, in that which you call the obscure, indefinite sense

of the word *matter*, it is plain, by your own confession, there was included no idea at all, no sense, except an unknown sense, which is the same thing as none. You are not, therefore, to expect I should prove a repugnancy between ideas, where there are no ideas: or the impossibility of matter taken in an *unknown* sense, *i.e.* no sense at all. My business was only to shew, you meant *nothing*; and this you were brought to own. So that in all your various senses, you have been shew'd either to mean nothing at all, or, if any thing, an absurdity. And if this be not sufficient to prove the impossibility of a thing, I desire you will let me know what is.

Hyl. I acknowledge, you have proved that matter is impossible; nor do I see what more can be said in defence of it. But, at the same time that I give up this, I suspect all my other notions. For surely none could be more seemingly evident than this once was: and yet it now seems as false and absurd as ever it did true before. But I think we have discussed the point sufficiently for the present. The remaining part of the day I wou'd willingly spend, in running over in my thoughts the several heads of this morning's conversation, and to-morrow shall be glad to meet you here again about the same time.

Phil. I will not fail to attend you.

THE THIRD DIALOGUE

Philonous. So, *Hylas*, what are the fruits of yesterday's meditation? Has it confirmed you in the same mind you were in at parting? or have you since seen cause to change your opinion?

Hyl. Truly my opinion is, that all our opinions are alike vain and uncertain. What we approve to-day, we condemn to-morrow. We keep a stir about knowledge, and spend our lives in the pursuit of it, when, alas! we know nothing all the while: nor do I think it possible for us ever to know anything in this life. Our faculties are too narrow and too few. Nature certainly never intended us for speculation.

Phil. What! say you we can know nothing, *Hylas*?

Hyl. There is not that single thing in the world whereof we can know the real nature, or what it is in itself.

Phil. Will you tell me I do not really know what fire or water is?

Hyl. You may indeed know that fire appears hot, and water fluid: but this is no more than knowing what sensations are pro-

duced in your own mind, upon the application of fire and water to your organs of sense. Their internal constitution, their true and real nature, you are utterly in the dark as to *that*.

Phil. Do I not know this to be a real stone that I stand on, and that which I see before my eyes to be a real tree?

Hyl. *Know?* no, it is impossible you or any man alive shou'd know it. All you know, is, that you have such a certain idea or appearance in your own mind. But what is this to the real tree or stone? I tell you that colour, figure, and hardness, which you perceive, are not the real natures of those things, or in the least like them. The same may be said of all other real things or corporeal substances which compose the world. They have none of them any thing in themselves, like those sensible qualities by us perceived. We shou'd not therefore pretend to affirm or know any thing of them, as they are in their own nature.

Phil. But surely, *Hylas*, I can distinguish gold, for example, from iron: and how could this be, if I knew not what either truly was?

Hyl. Believe me, *Philonous*, you can only distinguish between your own ideas. That yellowness, that weight, and other sensible qualities, think you they are really in the gold? They are only relative to the senses, and have no absolute existence in nature. And in pretending to distinguish the species of real things, by the appearances in your mind, you may, perhaps, act as wisely as he that shou'd conclude two men were of a different species, because their cloaths were not of the same colour.

Phil. It seems then we are altogether put off with the appearances of things, and those false ones too. The very meat I eat, and the cloth I wear, have nothing in them like what I see and feel.

Hyl. Even so.

Phil. But is it not strange the whole world shou'd be thus imposed on, and so foolish as to believe their senses? And yet I know not how it is, but men eat, and drink, and sleep, and perform all the offices of life, as comfortably and conveniently, as if they really knew the things they are conversant about.

Hyl. They do so: but, you know, ordinary practice does not require a nicety of speculative knowledge. Hence the vulgar retain their mistakes, and for all that, make a shift to bustle thorow the affairs of life. But philosophers know better things.

Phil. You mean, they know that they *know nothing*.

Hyl. That is the very top and perfection of humane knowledge.

Phil. But are you all this while in earnest, *Hylas*; and are you seriously persuaded that you know nothing real in the world? Suppose you are going to write, wou'd you not call for pen, ink, and paper, like another man; and do you not know what it is you call for?

Hyl. How often must I tell you, that I know not the real nature of any one thing in the universe? I may indeed upon occasion make use of pen, ink, and paper. But, what any one of them is in its own true nature, I declare positively I know not. And the same is true with regard to every other corporeal thing. And, what is more, we are not only ignorant of the true and real nature of things, but even of their existence. It cannot be denied that we perceive such certain appearances or ideas; but it cannot be concluded from thence that bodies really exist. Nay, now I think on it, I must, agreeably to my former concessions, farther declare that it is impossible any real corporeal thing shou'd exist in nature.

Phil. You amaze me. Was ever anything more wild and extravagant than the notions you now maintain: and is it not evident you are led into all these extravagances by the belief of *material substance*? This makes you dream of those unknown natures in every thing. It is this occasions your distinguishing between the reality and sensible appearances of things. It is to this you are indebted for being ignorant of what everybody else knows perfectly well. Nor is this all: you are not only ignorant of the true nature of every thing, but you know not whether any thing really exists, or whether there are any true natures at all; forasmuch as you attribute to your material beings an absolute or external existence, wherein you suppose their reality consists. And as you are forced in the end to acknowlege, such an existence means either a direct repugnancy, or nothing at all, it follows that you are obliged to pull down your own hypothesis of material substance, and positively to deny the real existence of any part of the universe. And so you are plunged into the deepest and most deplorable *scepticism* that ever man was. Tell me, *Hylas*, is it not as I say?

Hyl. I agree with you. *Material substance* was no more than an hypothesis, and a false and groundless one too. I will no longer

spend my breath in defence of it. But, whatever hypothesis you advance, or whatsoever scheme of things you introduce in its stead, I doubt not it will appear every whit as false: let me but be allowed to question you upon it. That is, suffer me to serve you in your own kind, and I warrant it shall conduct you through as many perplexities and contradictions, to the very same state of scepticism that I myself am in at present.

Phil. I assure you, *Hylas*, I do not pretend to frame any hypothesis at all. I am of a vulgar cast, simple enough to believe my senses, and leave things as I find them. To be plain, it is my opinion, that the real things are those very things I see and feel, and perceive by my senses. These I know, and, finding they answer all the necessities and purposes of life, have no reason to be solicitous about any other unknown beings. A piece of sensible bread, for instance, wou'd stay my stomach better than ten thousand times as much of that insensible, unintelligible, real bread you speak of. It is likewise my opinion that colours and other sensible qualities are on the objects. I cannot for my life help thinking that snow is white, and fire hot. You indeed, who by *snow* and *fire* mean certain external, unperceived, unperceiving substances, are in the right to deny whiteness or heat to be affections inherent in them. But I, who understand by those words the things I see and feel, am obliged to think like other folks. And, as I am no sceptic with regard to the nature of things, so neither am I as to their existence. That a thing shou'd be really perceived by my senses, and at the same time not really exist, is to me a plain contradiction; since I cannot prescind or abstract, even in thought, the existence of a sensible thing from its being perceived. Wood, stones, fire, water, flesh, iron, and the like things, which I name and discourse of, are things that I know; otherwise I shou'd never have thought of them, or named them. And I shou'd not have known them, but that I perceived them by my senses; and things perceived by the senses are immediately perceived; and things immediately perceived are ideas; and ideas cannot exist without the mind; their existence, therefore, consists in being perceived; when, therefore, they are actually perceived there can be no doubt of their existence. Away then with all that scepticism, all those ridiculous philosophical doubts. What a jest is it for a philosopher to question the existence of sensible things, till he has it proved to

him from the veracity of God: or to pretend our knowledge in this point falls short of intuition or demonstration? I might as well doubt of my own being, as of the being of those things I actually see and feel.

Hyl. Not so fast, *Philonous*: you say you cannot conceive how sensible things shou'd exist without the mind. Do you not?

Phil. I do.

Hyl. Supposing you were annihilated, cannot you conceive it possible, that things perceivable by sense, may still exist?

Phil. I can; but then it must be in another mind. When I deny sensible things an existence out of the mind, I do not mean my mind in particular, but all minds. Now, it is plain, they have an existence exterior to my mind; since I find them, by experience, to be independent of it. There is, therefore, some other mind wherein they exist, during the intervals between the times of my perceiving them: as, likewise, they did before my birth, and wou'd do after my supposed annihilation. And, as the same is true, with regard to all other finite, created spirits; it necessarily follows there is an *omnipresent, eternal mind*, which knows and comprehends all things, and exhibits them to our view in such a manner, and according to such rules, as He himself has ordained, and are by us termed the *laws of nature*.

Hyl. Answer me, *Philonous*. Are all our ideas perfectly inert beings? or have they any agency included in them?

Phil. They are altogether passive and inert.

Hyl. And is not God an agent, a being purely active?

Phil. I acknowledge it.

Hyl. No idea, therefore, can be like unto, or represent the nature of God?

Phil. It cannot.

Hyl. Since, therefore, you have no idea of the mind of God, how can you conceive it possible that things shou'd exist in His mind? Or, if you can conceive the mind of God, without having an idea of it, why may not I be allowed to conceive the existence of matter, notwithstanding I have no idea of it?

Phil. As to your first question: I own I have properly no idea, either of God or any other spirit; for, these being active, cannot be represented by things perfectly inert, as our ideas are. I do, nevertheless, know, that I, who am a spirit or thinking substance, exist

as certainly, as I know my ideas exist. Farther, I know what I mean by the terms *I* and *myself*; and I know this immediately, or intuitively, tho' I do not perceive it as I perceive a triangle, a colour, or a sound. The mind, spirit, or soul is that indivisible unextended thing which thinks, acts, and perceives. I say, *indivisible*, because unextended; and *unextended*, because extended, figured, moveable things are ideas; and that which perceives ideas, which thinks, and wills, is plainly itself no idea, nor like an idea. Ideas are things inactive, and perceived. And spirits a sort of beings, altogether different from them. I do not, therefore, say, my soul is an idea, or like an idea. However, taking the word *idea* in a large sense, my soul may be said to furnish me with an idea, that is, an image, or likeness of God, though indeed extremely inadequate. For all the notion I have of God, is obtained by reflecting on my own soul, heightning its powers, and removing its imperfections. I have, therefore, tho' not an inactive idea, yet in myself some sort of an active, thinking image of the Deity. And tho' I perceive Him not by sense, yet I have a notion of Him, or know Him by reflexion and reasoning. My own mind, and my own ideas, I have an immediate knowledge of; and by the help of these, do mediately apprehend the possibility of the existence of other spirits and ideas. Farther, from my own being, and from the dependency I find in myself, and my ideas, I do, by an act of reason, necessarily infer the existence of a God, and of all created things in the mind of God. So much for your first question. For the second: I suppose, by this time you can answer it yourself. For you neither perceive matter objectively, as you do an inactive being or idea, nor know it, as you do yourself, by a reflex act: neither do you mediately apprehend it by similitude of the one or the other: nor yet collect it by reasoning from that which you know immediately. All which makes the case of *matter* widely different from that of the *Deity*.⁷

⁷ Added in the third edition:

"*Hyl*. You say your own soul supplies you with some sort of an idea or image of God. But at the same time, you acknowledge you have, properly speaking, no *idea* of your own soul. You even affirm that spirits are a sort of beings altogether different from ideas. Consequently that no idea can be like a spirit. We have therefore no idea of any spirit. You admit nevertheless that there is spiritual substance, although you have no idea of it; while you deny there can be such a thing as material sub-

Hyl. I own myself satisfied in this point. But do you in earnest think, the real existence of sensible things consists in their being actually perceived? If so; how comes it that all mankind distinguish between them? Ask the first man you meet, and he shall tell you, *to be perceived* is one thing, and *to exist* is another.

Phil. I am content, *Hylas*, to appeal to the common sense of the world for the truth of my notion. Ask the gardener why he thinks yonder cherry-tree exists in the garden, and he shall tell you, because he sees and feels it; in a word, because he perceives it by his senses. Ask him why he thinks an orange-tree not to be there, and he shall tell you, because he does not perceive it. What he perceives by sense, that he terms a real being, and saith it *is*, or *exists*; but that which is not perceivable, the same, he saith, hath no being.

Hyl. Yes, *Philonous*, I grant the existence of a sensible thing consists in being perceivable, but not in being actually perceived.

Phil. And what is perceivable but an idea? And can an idea exist without being actually perceived? These are points long since agreed between us.

stance, because you have no notion or idea of it. Is this fair dealing? To act consistently, you must either admit matter or reject spirit. What say you to this?

Phil. I say, in the first place, that I do not deny the existence of material substance, merely because I have no notion of it, but because the notion of it is inconsistent; or, in other words, because it is repugnant that there should be a notion of it. Many things, for aught I know, may exist, whereof neither I nor any other man has or can have any idea or notion whatsoever. But then those things must be possible, that is, nothing inconsistent must be included in their definition. I say, secondly, that, although we believe things to exist which we do not perceive, yet we may not believe that any particular thing exists, without some reason for such belief: but I have no reason for believing the existence of matter. I have no immediate intuition thereof: neither can I immediately from my sensations, ideas, notions, actions, or passions, infer an unthinking, unperceiving, inactive Substance, either by probable deduction, or necessary consequence. Whereas the being of my self, that is, my own soul, mind, or thinking principle, I evidently know by reflexion. You will forgive me if I repeat the same things in answer to the same objections. In the very notion or definition of *material substance*, there is included a manifest repugnance and inconsistency. But this cannot be said of the notion of spirit. That ideas should exist in what doth not perceive, or be produced by what doth not act, is repugnant. But it is no repugnancy to say that a perceiving thing should be the subject of ideas, or an active thing the cause of them. It is granted we have neither an immediate evidence nor a demonstrative knowledge of the existence of other finite spirits; but it will not thence follow that such spirits are on a foot with material substances: if to suppose the one be inconsistent, and it be not inconsistent

Hyl. But, be your opinion never so true: yet, surely, you will not deny it is shocking, and contrary to the common sense of men. Ask the fellow whether yonder tree has an existence out of his mind: what answer think you he wou'd make?

Phil. The same that I shou'd myself, to wit, that it does exist out of his mind. But then to a Christian, it cannot surely be shocking to say, the real tree existing without his mind is truly known and comprehended by (that is, *exists in*) the infinite mind of God. Probably he may not at first glance be aware of the direct and immediate proof there is of this, inasmuch as the very being of a tree, or any other sensible thing, implies a mind wherein it is. But the point itself he cannot deny. The question between the materialists and me is not, whether things have a real existence out of the mind of this or that person, but whether they have an absolute existence, distinct from being perceived by God, and exterior to all minds. This, indeed, some heathens and philosophers have affirmed, but whoever entertains notions of the Deity suitable to the Holy Scriptures, will be of another opinion.

to suppose the other; if the one can be inferred by no argument, and there is a probability for the other; if we see signs and effects indicating distinct finite agents like ourselves, and see no sign or symptom whatever that leads to a rational belief of matter. I say, lastly, that I have a notion of spirit, though I have not, strictly speaking, an idea of it. I do not perceive it as an idea, or by means of an idea, but know it by reflexion.

Hyl. Notwithstanding all you have said, to me it seems that, according to your own way of thinking, and in consequence of your own principles, it should follow that *you* are only a system of floating ideas, without any substance to support them. Words are not to be used without a meaning. And, as there is no more meaning in *spiritual substance* than in *material substance*, the one is to be exploded as well as the other.

Phil. How often must I repeat, that I know or am conscious of my own being; and that *I myself* am not my ideas, but somewhat else, a thinking, active principle that perceives, knows, wills, and operates about ideas. I know that I, one and the same self, perceive both colours and sounds: that a colour cannot perceive a sound, nor a sound a colour: that I am therefore one individual principle, distinct from colour and sound; and, for the same reason, from all other sensible things and inert ideas. But I am not in like manner conscious either of the existence or essence of matter. On the contrary, I know that nothing inconsistent can exist, and that the existence of matter implies an inconsistency. Farther, I know what I mean, when I affirm that there is a spiritual substance or support of ideas, that is, that a spirit knows and perceives ideas. But I do not know what is meant, when it is said, that an unperceiving substance has inherent in it and supports either ideas or the archetypes of ideas. There is therefore upon the whole no parity of case between spirit and matter."

Hyl. But, according to your notions, what difference is there between real things, and chimeras formed by the imagination, or the visions of a dream, since they are all equally in the mind?

Phil. The ideas formed by the imagination, are faint and indistinct; they have, besides, an intire dependence on the will. But the ideas perceived by sense, *i.e.*, real things, are more vivid and clear, and, being imprinted on the mind by a spirit distinct from us, have not the like dependence on our will. There is, therefore, no danger of confounding these with the foregoing: and there is as little of confounding them with the visions of a dream, which are dim, irregular, and confused. And, tho' they shou'd happen to be never so lively and natural, yet by their not being connected, and of a piece, with the preceding and subsequent transactions of our lives, they might easily be distinguished from realities. In short, by whatever method you distinguish *things* from *chimeras* on your scheme, the same, it is evident, will hold also upon mine. For, it must be, I presume, by some perceived difference; and I am not for depriving you of any one thing that you perceive.

Hyl. But still, *Philonous*, you hold, there is nothing in the world but spirits and ideas. And this, you must needs acknowledge, sounds very odly.

Phil. I own the word *idea*, not being commonly used for *thing*, sounds something out of the way. My reason for using it was, because a necessary relation to the mind is understood to be implied by that term; and it is now commonly used by philosophers to denote the immediate objects of the understanding. But however odly the proposition may sound in words, yet it includes nothing so very strange or shocking in its sense; which in effect amounts to no more than this, *viz.* that there are only things perceiving, and things perceived; or that every unthinking being is necessarily, and from the very nature of its existence, perceived by some mind; if not by a finite, created mind, yet certainly by the infinite mind of God, in whom *we live, and move, and have our being*. Is this as strange as to say; the sensible qualities are not on the objects: or, that we cannot be sure of the existence of things, or know anything of their real natures, though we both see and feel them, and perceive them by all our senses?

Hyl. And in consequence of this, must we not think there are no such things as physical or corporeal causes: but that a spirit is

the immediate cause of all the *phaenomena* in nature? Can there be anything more extravagant than this?

Phil. Yes, it is infinitely more extravagant to say, a thing which is inert, operates on the mind, and which is unperceiving, is the cause of our perceptions, without any regard either to consistency, or the old known axiom, *Nothing can give to another that which it hath not itself*.⁸ Besides, that which to you, I know not for what reason, seems to extravagant, is no more than the Holy Scriptures assert in a hundred places. In them God is represented as the sole and immediate author of all those effects which some heathens and philosophers are wont to ascribe to nature, matter, fate, or the like unthinking principle. This is so much the constant language of Scripture that it were needless to confirm it by citations.

Hyl. You are not aware, *Philonous*, that, in making God the immediate author of all the motions in nature, you make Him the author of murder, sacrilege, adultery, and the like heinous sins.

Phil. In answer to that, I observe first, that the imputation of guilt is the same, whether a person commits an action with or without an instrument. In case therefore you suppose God to act by the mediation of an instrument, or occasion, called *matter*, you as truly make Him the author of sin as I, who think Him the immediate agent in all those operations vulgarly ascribed to nature. I farther observe, that sin or moral turpitude does not consist in the outward physical action or motion, but in the internal deviation of the will from the laws of reason and religion. This is plain, in that the killing an enemy in a battel, or putting a criminal legally to death, is not thought sinful, tho' the outward act be the very same with that in the case of murder. Since, therefore, sin does not consist in the physical action, the making God an immediate cause of all such actions is not making Him the author of sin. Lastly, I have no where said, that God is the only agent who produces all the motions in bodies. It is true, I have denied there are any other agents besides spirits; but this is very consistent with allowing to thinking, rational beings, in the production of motions, the use of limited powers, ultimately, indeed, derived from God, but immediately under the direction of their own wills, which is sufficient to intitle them to all the guilt of their actions.

⁸ The second half of this sentence (from "without any regard") was omitted in the third edition.

Hyl. But the denying matter, *Philonous*, or corporeal substance; there is the point. You can never persuade me that this is not repugnant to the universal sense of mankind. Were our dispute to be determined by most voices, I am confident you wou'd give up the point, without gathering the votes.

Phil. I wish both our opinions were fairly stated, and submitted to the judgment of men, who had plain common sense, without the prejudices of a learned education. Let me be represented as one who trusts his senses, who thinks he knows the things he sees and feels, and entertains no doubts of their existence; and you fairly set forth with all your doubts, your paradoxes, and your scepticism about you, and I shall willingly acquiesce in the determination of any indifferent person. That there is no substance wherein ideas can exist beside spirit, is to me evident. And that the objects immediately perceived, are ideas, is on all hands agreed. And that sensible qualities are objects immediately perceived, no one can deny. It is therefore evident, there can be no *substratum* of those qualities, but spirit, in which they exist, not by way of mode or property, but as a thing perceived in that which perceives it. I deny therefore that there is any unthinking *substratum* of the objects of sense, and, in that acceptation, that there is any material substance. But if by *material substance* is meant only sensible body, that which is seen and felt (and the unphilosophical part of the world I dare say mean no more), then I am more certain of matter's existence than you, or any other philosopher, pretend to be. If there be any thing which makes the generality of mankind averse from the notions I espouse: it is a misapprehension that I deny the reality of sensible things: but, as it is you who are guilty of that, and not I, it follows, that in truth their aversion is against your notions, and not mine. I do therefore assert, that I am as certain as of my own being, that there are bodies or corporeal substances (meaning the things I perceive by my senses) and that, granting this, the bulk of mankind will take no thought about, nor think themselves at all concerned in the fate of, those unknown natures, and philosophical quiddities, which some men are so fond of.

Hyl. What say you to this: since, according to you, men must judge of the reality of things by their senses, how can a man be mistaken in thinking the moon a plain lucid surface, about a foot

in diameter; or a square tower, seen at a distance, round; or an oar, with one end in the water, crooked?

Phil. He is not mistaken, with regard to the ideas he actually perceives; but in the inferences he makes from his present perceptions. Thus, in the case of the oar, what he immediately perceives by sight, is certainly crooked; and so far he is in the right. But, if he thence conclude, that upon taking the oar out of the water, he shall perceive the same crookedness; or, that it wou'd affect his touch, as crooked things are wont to do: in that he is mistaken. In like manner, if he shall conclude from what he perceives in one station, that, in case he advances towards the moon or tower, he shou'd still be affected with the like ideas, he is mistaken. But his mistake lies not in what he perceives immediately, and at present, (it being a manifest contradiction to suppose, he shou'd err in respect of that), but, in the wrong judgment he makes, concerning the ideas he apprehends to be connected with those immediately perceived: or, concerning the ideas that, from what he perceives at present, he imagines wou'd be perceived in other circumstances. The case is the same with regard to the *Copernican* system. We do not here perceive any motion of the earth: but it were erroneous thence to conclude, that, in case we were placed at as great a distance from that, as we are now from the other planets, we shou'd not then perceive its motion.

Hyl. I understand you; and must needs own, you say things plausible enough: but, give me leave to put you in mind of one thing. Pray, *Philonous*, were you not formerly as positive that matter existed, as you are now that it does not?

Phil. I was. But here lies the difference. Before, my positiveness was founded without examination upon prejudice; but now, after inquiry, upon evidence.

Hyl. After all, it seems our dispute is rather about words than things. We agree in the thing, but differ in the name. That we are affected with ideas from without, is evident; and it is no less evident, that there must be (I will not say archetypes, but) powers without the mind, corresponding to those ideas. And, as these powers cannot subsist by themselves, there is some subject of them necessarily to be admitted, which I call *matter*, and you call *spirit*. This is all the difference.

Phil. Pray, *Hylas*, is that powerful being, or subject of powers, extended?

Hyl. It hath not extension; but it hath the power to raise in you the idea of extension.

Phil. It is therefore itself unextended.

Hyl. I grant it.

Phil. Is it not also active?

Hyl. Without doubt: otherwise, how cou'd we attribute powers to it?

Phil. Now let me ask you two questions: *first*, whether it be agreeable to the usage either of philosophers or others to give the name *matter* to an unextended active being? And, *secondly*, whether it be not ridiculously absurd, to misapply names contrary to the common use of language?

Hyl. Well then, let it not be called matter, since you will have it so, but some third nature distinct from matter and spirit. For what reason is there, why you shou'd call it spirit; does not the notion of spirit imply, that it is thinking, as well as active and unextended?

Phil. My reason is this: because I have a mind to have some notion or meaning in what I say, but I have no notion of any action distinct from volition, neither can I conceive volition to be any where but in a spirit: therefore, when I speak of an active being, I am obliged to mean a spirit. Beside, what can be plainer, than that a thing which hath no ideas in itself, cannot impart them to me; and if it hath ideas, surely it must be a spirit. To make you comprehend the point still more clearly, if it be possible: I assert as well as you, that, since we are affected from without, we must allow powers to be without, in a being distinct from ourselves. So far we are agreed. But then, we differ as to the kind of this powerful being. I will have it to be spirit, you matter, or I know not what (I may add too, you know not what) third nature. Thus, I prove it to be spirit. From the effects I see produced, I conclude, there are actions; and, because actions, volitions; and, because there are volitions, there must be a will. Again, the things I perceive, must have an existence, they or their archetypes, out of my mind: but, being ideas, neither they, nor their archetypes can exist, otherwise than in an understanding: there is, therefore, an understanding. But will and understanding constitute in the strictest

sense, a mind or spirit. The powerful cause, therefore, of my ideas, is in strict propriety of speech a *spirit*.

Hyl. And now, I warrant, you think you have made the point very clear, little suspecting, that what you advance leads directly to a contradiction. Is it not an absurdity, to imagine any imperfection in God?

Phil. Without a doubt.

Hyl. To suffer pain, is an imperfection.

Phil. It is.

Hyl. Are we not sometimes affected with pain, and uneasiness, by some other being?

Phil. We are.

Hyl. And have you not said, that being is a spirit, and is not that spirit God?

Phil. I grant it.

Hyl. But you have asserted, that whatever ideas we perceive from without, are in the mind which affects us. The ideas, therefore, of pain and uneasiness are in God, or, in other words, God suffers pain: that is to say, there is an imperfection in the Divine nature, which, you acknowledged, was absurd. So you are caught in a plain contradiction.

Phil. That God knows or understands all things, and that He knows, among other things, what pain is, even every sort of painful sensation, and what it is for His creatures to suffer pain, I make no question. But that God, tho' He knows, and sometimes causes painful sensations in us, can Himself suffer pain, I positively deny. We, who are limited and dependent spirits, are liable to impressions of sense, the effects of an external agent, which, being produced against our wills, are sometimes painful and uneasy. But God, whom no external being can affect, who perceives nothing by sense as we do, whose will is absolute, and independent, causing all things, and liable to be thwarted, or resisted by nothing; it is evident, such a Being as this, can suffer nothing, nor be affected with any painful sensation, or, indeed, any sensation at all. We are chained to a body, that is to say, our perceptions are connected with corporeal motions. By the law of our nature, we are affected upon every alteration in the nervous parts of our sensible body; which sensible body, rightly considered, is nothing but a complexion of such qualities, or ideas, as have no existence distinct from being

perceived by a mind: so that this connexion of sensations with corporeal motions, means no more than a correspondence in the order of nature, between two sets of ideas, or things immediately perceivable. But God is a pure spirit, disengaged from all such sympathy, or natural ties. No corporeal motions are attended with the sensations of pain, or pleasure, in his mind. To know every thing knowable, is certainly a perfection; but to endure, or suffer, or feel anything by sense, is an imperfection. The former, I say, agrees to God, but not the latter. God knows, or hath ideas; but His ideas are not convey'd to Him by sense, as ours are. Your not distinguishing, where there is so manifest a difference, makes you fancy, you see an absurdity where there is none.

Hyl. But, all this while, you have not considered that the quantity of matter has been demonstrated to be proportioned to the gravity of bodies. And what can withstand demonstration?

Phil. Let me see how you demonstrate that point.

Hyl. I lay it down for a principle, that the moments, or quantities of motion in bodies, are in a direct compounded reason of the velocities, and quantities of matter contained in them. Hence, where the velocities are equal, it follows, the moments are directly as the quantity of matter in each. But it is found by experience, that all bodies (bating the small inequalities, arising from the resistance of the air) descend with an equal velocity; the motion, therefore, of descending bodies, and consequently their gravity, which is the cause or principle of that motion, is proportional to the quantity of matter; which was to be demonstrated.

Phil. You lay it down as a self-evident principle, that the quantity of motion in any body is proportional to the velocity and *matter*, taken together; and this is made use of to prove a proposition, from whence the existence of *matter* is inferred. Pray, is not this arguing in a circle?

Hyl. In the premise, I only mean, that the motion is proportional to the velocity, jointly with the extension and solidity.

Phil. But allowing this to be true, yet it will not thence follow, that gravity is proportional to *matter*, in your philosophic sense of the word; except you take it for granted, that unknown *substratum*, or whatever else you call it, is proportional to those sensible qualities; which to suppose, is plainly begging the question. That there is magnitude and solidity, or resistance, perceived by sense, I

readily grant; as likewise that gravity may be proportional to those qualities, I will not dispute. But that either these qualities, as perceived by us, or the powers producing them, do exist in a *material substratum*; this is what I deny, and you, indeed, affirm, but, notwithstanding your demonstration, have not yet proved.

Hyl. I shall insist no longer on that point. Do you think, however, you shall persuade me the natural philosophers have been dreaming all this while; pray, what becomes of all their hypotheses and explications of the *phaenomena*, which suppose the existence of matter?

Phil. What mean you, *Hylas*, by the *phaenomena*?

Hyl. I mean the appearances which I perceive by my senses.

Phil. And the appearances perceived by sense, are they not ideas?

Hyl. I have told you so a hundred times.

Phil. Therefore, to explain the *phaenomena*, is to shew how we come to be affected with ideas, in that manner and order wherein they are imprinted on our senses. Is it not?

Hyl. It is.

Phil. Now, if you can prove that any philosopher hath explained the production of any one idea in our minds, by the help of *matter*, I shall for ever acquiesce and look on all that hath been said against it as nothing: but if you cannot, it is vain to urge the explication of *phaenomena*. That a Being endowed with knowledge and will, shou'd produce or exhibit ideas, is easily understood. But that a Being which is utterly destitute of these faculties shou'd be able to produce ideas, or in any sort to affect an intelligence, this I can never understand. This I say, tho' we had some positive conception of matter, tho' we knew its qualities, and cou'd comprehend its existence, wou'd yet be so far from explaining things, that it is itself the most inexplicable thing in the world. And for all this, it will not follow, that philosophers have been doing nothing neither; for, by observing and reasoning upon the connexion of ideas, they discover the laws and methods of nature, which is a part of knowledge both useful and entertaining.

Hyl. After all, can it be supposed God would deceive all mankind; do you imagine He wou'd have induced the whole world to believe the being of matter, if there was no such thing?

Phil. That every epidemical opinion arising from prejudice, or

passion, or thoughtlessness, may be imputed to God, as the Author of it, I believe you will not affirm. Whatsoever opinion we father on Him, it must be, either because He has discovered it to us by supernatural revelation, or, because it is so evident to our natural faculties, which were framed and given us by God, that it is impossible we should with-hold our assent from it. But, where is the revelation? or, where is the evidence that extorts the belief of matter? Nay, how does it appear, that matter, taken for something distinct from what we perceive by our senses, is thought to exist by all mankind, or, indeed, by any, except a few philosophers, who do not know what they wou'd be at? Your question supposes, these points are clear; and when you have cleared them, I shall think myself obliged to give you another answer. In the mean time, let it suffice that I tell you, I do not suppose God has deceived mankind at all.

Hyl. But the novelty, *Philonous*, the novelty! There lies the danger. New notions shou'd always be discountenanced; they unsettle mens minds, and no body knows where they will end.

Phil. Why the rejecting a notion that has no foundation, either in sense, or in reason, or in Divine authority, shou'd be thought to unsettle the belief of such opinions as are grounded on all or any of these, I cannot imagine. That innovations in government and religion, are dangerous, and ought to be discountenanced, I freely own. But, is there the like reason why they shou'd be discouraged in philosophy? The making anything known which was unknown before, is an innovation in knowledge: and, if all such innovations had been forbidden, men wou'd have made a notable progress in the arts and sciences. But, it is none of my business to plead for novelties and paradoxes. That the qualities we perceive, are not on the objects: that we must not believe our senses: that we know nothing of the real nature of things, and can never be assured even of their existence: that real colours and sounds, are nothing but certain unknown figures and motions: that motions are, in themselves, neither swift nor slow: that there are in bodies, absolute extensions, without any particular magnitude or figure: that a thing stupid, thoughtless, and inactive, operates on a spirit: that the least particle of a body, contains innumerable extended parts. These are the novelties, these are the strange notions which shock the genuine, uncorrupted judgment of all mankind; and, being once admitted, embarrass the mind with endless doubts and difficulties.

And, it is against these, and the like innovations, I endeavor to vindicate common sense. It is true, in doing this, I may, perhaps be obliged to use some *ambages*, and ways of speech not common. But, if my notions are once thorowly understood, that which is most singular in them, will, in effect, be found to amount to no more than this: that it is absolutely impossible, and a plain contradiction, to suppose any unthinking being shou'd exist, without being perceived by a mind. And if this notion be singular, it is a shame it shou'd be so at this time of day, and in a Christian country.

Hyl. As for the difficulties other opinions may be liable to, those are out of the question. It is your business to defend your own opinion. Can any thing be plainer, than that you are for changing all things into ideas? You, I say, who are not ashamed to charge me with *scepticism*. This is so plain, there is no denying it.

Phil. You mistake me. I am not for changing things into ideas, but rather ideas into things; since those immediate objects of perception, which, according to you, are only appearances of things, I take to be the real things themselves.

Hyl. Things! you may pretend what you please; but it is certain, you leave us nothing but the empty forms of things, the outside, only which strikes the senses.

Phil. What you call the empty forms and outside of things, seem to me, the very things themselves. Nor are they empty or incomplete otherwise, than upon your supposition, that matter is an essential part of all corporeal things. We both, therefore, agree in this, that we perceive only sensible forms: but herein we differ, you will have them to be empty appearances, I real beings. In short, you do not trust your senses, I do.

Hyl. You say, you believe your senses; and seem to applaud yourself, that in this you agree with the vulgar. According to you, therefore, the true nature of a thing is discovered by the senses. If so, whence comes that disagreement? Why is not the same figure, and other sensible qualities, perceived all manner of ways? And why shou'd we use a microscope, the better to discover the true nature of a body, if it were discoverable to the naked eye?

Phil. Strictly speaking, *Hylas*, we do not see the same object that we feel; neither is the same object perceived by the microscope, which was by the naked eye. But, in case every variation was

thought sufficient to constitute a new kind or individual, the endless number or confusion of names would render language impracticable. Therefore, to avoid this, as well as other inconveniences which are obvious upon a little thought, men combine together several ideas, apprehended by divers senses, or by the same sense at different times, or in different circumstances, but observed, however, to have some connexion in nature, either with respect to co-existence or succession; all which they refer to one name, and consider as one thing. Hence, it follows, that when I examine by my other senses a thing I have seen, it is not, in order to understand better the same object which I had perceived by sight, the object of one sense not being perceived by the other senses. And, when I look thro' a microscope, it is not that I may perceive more clearly, what I perceived already with my bare eyes, the object perceived by the glass being quite different from the former. But in both cases, my aim is only to know what ideas are connected together; and the more a man knows of the connexion of ideas, the more he is said to know of the nature of things. What, therefore, if our ideas are variable; what if our senses are not in all circumstances affected with the same appearances? It will not thence follow, they are not to be trusted, or, that they are inconsistent either with themselves, or anything else, except it be with your preconceived notion of (I know not what) one single, unchanged, unperceivable, real nature, marked by each name: which prejudice seems to have taken its rise, from not rightly understanding the common language of men, speaking of several distinct ideas, as united into one thing by the mind. And, indeed, there is cause to suspect several erroneous conceits of the philosophers are owing to the same original: while they began to build their schemes, not so much on notions as words, which were framed by the vulgar, meerly for conveniency and dispatch in the common actions of life, without any regard to speculation.

Hyl. Methinks I apprehend your meaning.

Phil. It is your opinion, the ideas we perceive by our senses, are not real things, but images, or copies of them. Our knowlege, therefore, is no farther real, than as our ideas are the true representations of those originals. But, as these supposed originals are in themselves unknown, it is impossible to know how far our ideas resemble them; or, whether they resemble them at all. We cannot,

therefore, be sure we have any real knowlege. Farther, as our ideas are perpetually varied, without any change in the supposed real things, it necessarily follows, they cannot all be true copies of them: or, if some are and others are not, it is impossible to distinguish the former from the latter. And, this plunges us yet deeper in uncertainty. Again, when we consider the point, we cannot conceive how any idea, or any thing like an idea, shou'd have an absolute existence out of a mind: nor, consequently, according to you, how there shou'd be any real thing in nature. The result of all which is, that we are thrown into the most hopeless and abandoned *scepticism*. Now, give me leave to ask you, *first*, whether your referring ideas to certain absolutely existing, unperceived substances, as their originals, be not the source of all this *scepticism*? *Secondly*, whether you are informed, either by sense or reason, of the existence of these unknown originals? And in case you are not; whether it be not absurd to suppose them? *Thirdly*, whether, upon inquiry, you find there is anything distinctly conceived or meant by the *absolute or external existence of unperceiving substances*. *Lastly*, whether, the premises considered, it be not the wisest way to follow nature, trust your senses, and, laying aside all anxious thought about unknown natures or substances, admit with the vulgar, those for real things which are perceived by the senses?

Hyl. For the present, I have no inclination to the answering part. I would much rather see how you can get over what follows. Pray, are not the objects perceived by the senses of one, likewise perceivable to others present? If there were a hundred more here, they wou'd all see the garden, the trees, and flowers, as I see them. But they are not in the same manner affected with the ideas I frame in my imagination. Does not this make a difference, between the former sort of objects and the latter?

Phil. I grant, it does. Nor have I ever denied a difference between the objects of sense and those of imagination. But, what wou'd you infer from thence? You cannot say, that sensible objects exist unperceived, because they are perceived by many.

Hyl. I own, I can make nothing of that objection: but, it has led me into another. Is it not your opinion, that by our senses we perceive only the ideas existing in our minds?

Phil. It is.

Hyl. But the same idea which is in my mind, cannot be in yours,

or in any other mind. Doth it not, therefore, follow, from your principles, that no two can see the same thing? And, is not this highly absurd?

Phil. If the term *same* be taken in the vulgar acceptation, it is certain, (and not at all repugnant to the principles I maintain) that different persons may perceive the same thing; or, the same thing or idea exist in different minds. Words are of arbitrary imposition; and since men are used to apply the word *same* where no distinction or variety is perceived, and I do not pretend to alter their perceptions; it follows, that as men have said before, *several saw the same thing*, so they may, upon like occasions, still continue to use the same phrase, without any deviation either from propriety of language, or the truth of things. But, if the term *same* be used in the acceptation of philosophers, who pretend to an abstracted notion of identity, then, according to their sundry definitions of this notion (for it is not yet agreed, wherein that philosophic identity consists), it may, or may not, be possible for divers persons to perceive the same thing. But, whether philosophers shall think fit to call a thing the *same*, or no, is, I conceive, of small importance. Let us suppose several men together, all endued with the same faculties, and, consequently, affected in like sort by their senses, and who had yet never known the use of language; they wou'd, without question, agree in their perceptions. Tho', perhaps, when they came to the use of speech, some, regarding the uniformness of what was perceived, might call it the *same* thing: others, especially, regarding the diversity of persons, who perceived, might choose the denomination of *different* things. But, who sees not that all the dispute is about a word? *viz.* whether what is perceived by different persons, may, yet, have the term *same* applied to it: or, suppose a house, whose walls or outward shell remaining unaltered, the chambers are all pulled down, and new ones built in their place; and that you shou'd call this the *same*, and I shou'd say it was not the *same* house: would we not, for all this, perfectly agree in our thoughts of the house, considered in itself? And, wou'd not all the difference consist in a sound? If you shou'd say, we differed in our notions; for that you superadded to your idea of the house, the simple abstracted idea of identity, whereas I did not; I wou'd tell you, I know not what you mean by the *abstracted idea of identity*; and shou'd desire you to look into your own thoughts, and be sure you

understood yourself.—Why so silent, *Hylas*? Are you not yet satisfied, men may dispute about identity and diversity, without any real difference in their thoughts and opinions, abstracted from names? Take this farther reflexion with you: that whether matter be allowed to exist or no, the case is exactly the same as to the point in hand. For, the materialists themselves acknowledge, what we immediately perceive by our senses, to be our own ideas. Your difficulty, therefore, that no two see the same thing, makes equally against the materialists and me.

Hyl. Ay, *Philonous*, but they suppose an external archetype, to which, referring their several ideas, they may truly be said to perceive the same thing.

Phil. And (not to mention your having discarded those archetypes) so may you suppose, an external archetype on my principles, *external*, I mean, to your own mind; tho', indeed, it must be supposed to exist in that mind which comprehends all things; but then, this serves all the ends of identity, as well as if it existed out of a mind. And, I am sure, you yourself will not say, it is less intelligible.

Hyl. You have, indeed, clearly satisfied me, either that there is no difficulty at bottom in this point; or, if there be, that it makes equally against both opinions.

Phil. But that which makes equally against two contradictory opinions, can be a proof against neither.

Hyl. I acknowledge it. But, after all, *Philonous*, when I consider the substance of what you advance against *scepticism*, it amounts to no more than this. We are sure that we really see, hear, feel; in a word, that we are affected with sensible impressions.

Phil. And how are we concerned any farther? I see this *cherry*, I feel it, I taste it: and, I am sure, *nothing* cannot be seen, or felt, or tasted: it is therefore *real*. Take away the sensations of softness, moisture, redness, tartness, and you take away the *cherry*. Since it is not a being distinct from those sensations; a *cherry*, I say, is nothing but a congeries of sensible impressions, or ideas perceived by various senses: which ideas are united into one thing (or have one name given them) by the mind; because they are observed to attend each other. Thus, when the palate is affected with such a particular taste, the sight is affected with a red colour, the touch with roundness, softness, &c. Hence, when I see, and feel, and

taste, in sundry, certain manners, I am sure the *cherry* exists, or is real; its reality being in my opinion nothing abstracted from those sensations. But if, by the word *cherry*, you mean an unknown nature, distinct from all those sensible qualities, and by its *existence*, something distinct from its being perceived; then, indeed, I own, neither you or I, nor any one else, can be sure it exists.

Hyl. But what wou'd you say, *Philonous*, if I should bring the very same reasons against the existence of sensible things in a mind, which you have offered against their existing in a material *substratum*?

Phil. When I see your reasons, you shall hear what I have to say to them.

Hyl. Is the mind extended, or unextended?

Phil. Unextended, without doubt.

Hyl. Do you not say, the things you perceive are in your mind?

Phil. They are.

Hyl. Again, have I not heard you speak of sensible impressions?

Phil. I believe you may.

Hyl. Explain to me now, O *Philonous*! how is it possible there shou'd be room for all those trees and houses to exist in your mind. Can extended things be contained in that which is unextended? Or, are we to imagine impressions made on a thing void of all solidity? You cannot say, objects are in your mind, as books in your study: or, that things are imprinted on it, as the figure of a seal upon wax. In what sense, therefore, are we to understand those expressions? Explain me this if you can: and I shall then be able to answer all those queries you formerly put to me, about my *substratum*.

Phil. Look you, *Hylas*, when I speak of objects as existing in the mind, or imprinted on the senses, I wou'd not be understood in the gross, literal sense, as when bodies are said to exist in a place, or a seal to make an impression upon wax. My meaning is only, that the mind comprehends or perceives them; and that it is affected from without, or by some being distinct from itself. This is my explication of your difficulty; and, how it can serve to make your tenet of an unperceiving, material *substratum* intelligible, I would fain know.

Hyl. Nay, if that be all, I confess, I do not see what use can be made of it. But, are you not guilty of some abuse of language in this?

Phil. None at all: it is no more than common custom, which, you know, is the rule of language, has authorised: nothing being more usual, than for philosophers to speak of the immediate objects of the understanding, as things existing in the mind. Nor is there any thing in this, but what is conformable to the general analogy of language; most part of the mental operations being signified by words borrowed from sensible things; as is plain in the terms *comprehend, reflect, discourse, &c.*, which, being applied to the mind, must not be taken in their gross, original sense.

Hyl. You have, I own, satisfied me in this point: but there still remains one great difficulty, which I know not how you will get over. And, indeed, it is of such importance, that if you cou'd solve all others, without being able to find a solution for this, you must never expect to make me a proselyte to your principles.

Phil. Let me know this mighty difficulty.

Hyl. The Scripture account of the creation is what appears to me utterly irreconcilable with your notions. Moses tells us of a creation: a creation of what? of ideas? No, certainly, but of things, of real things, solid, corporeal substances. Bring your principles to agree with this, and I shall the sooner agree with you.

Phil. Moses mentions the sun, moon, and stars, earth and sea, plants and animals. That all these do really exist, and were, in the beginning, created by God, I make no question. If by *ideas*, you mean fictions, and fancies of the mind, then these are no ideas. If by *ideas*, you mean immediate objects of the understanding, or sensible things, which cannot exist unperceived, or out of a mind, then these things are ideas. But whether you do, or do not call them. ideas, it matters little. The difference is only about a name. And, whether that name be retained or rejected, the sense, the truth, and reality of things, continues the same. In common talk, the objects of our senses are not termed *ideas*, but *things*. Call them so still: provided you do not attribute to them any absolute, external existence, and I shall never quarrel with you for a word. The creation, therefore, I allow to have been a creation of things, of *real* things. Neither is this, in the least, inconsistent with my principles, as is evident from what I have now said; and wou'd have been evident to you without this, if you had not forgotten what had been so often said before. But, as for solid, corporeal substances, I desire you to shew where Moses makes any mention of them; and, if they

shou'd be mentioned by him, or any other inspired writer, it wou'd still be incumbent on you to shew, those words were not taken in the vulgar acceptation, for things falling under our senses, but in the philosophic acceptation, for matter, or an unknown quiddity, with an absolute existence. When you have proved these points, then (and not till then) may you bring the authority of Moses into our dispute.

Hyl. It is in vain to dispute about a point so clear. I am content to refer it to your own conscience. Are you not satisfied, there is some peculiar repugnancy between the Mosaic account of the creation, and your notions?

Phil. If all possible sense, which can be put on the first chapter of *Genesis*, may be conceived as consistently with my principles as any other, then it has no peculiar repugnancy with them. But there is no sense you may not as well conceive, believing as I do. Since, besides spirits, all you conceive are ideas; and the existence of these I do not deny. Neither do you pretend they exist without the mind.

Hyl. Pray, let me see any sense you can understand it in.

Phil. Why, I imagine, that, if I had been present at the creation, I should have seen things produced into being; that is, become perceptible, in the order prescribed by the sacred historian. I ever before believed the *Mosaic* account of the creation, and now find no alteration in my manner of believing it. When things are said to begin or end their existence, we do not mean this with regard to God, but His creatures. All objects are eternally known by God, or, which is the same thing, have an eternal existence in His mind: but, when things, before imperceptible to creatures, are, by a decree of God, perceptible to them; then are they said to begin a relative existence, with respect to created minds. Upon reading, therefore, the *Mosaic* account of the creation, I understand, that the several parts of the world became gradually perceivable to finite spirits, endowed with proper faculties; so that, whoever such were present, they were in truth perceived by them. This is the literal, obvious sense suggested to me by the words of the Holy Scripture: in which is included, no mention, or no thought, either of *substratum*, instrument, occasion, or absolute existence. And, upon inquiry, I doubt not, it will be found, that most plain, honest men, who believe the creation, never think of those things any more than I. What metaphysical sense you may understand it in, you only can tell.

Hyl. But, *Philonous*, you do not seem to be aware, that you allow created things, in the beginning, only a relative, and, consequently, hypothetical being: that is to say, upon supposition, there were men to perceive them, without which they have no actuality of absolute existence, wherein creation might terminate. Is it not, therefore, according to you, plainly impossible the creation of any inanimate creatures shou'd precede that of man? And is not this directly contrary to the *Mosaic* account?

Phil. In answer to that, I say, *first*, created beings might begin to exist, in the mind of other created intelligences, beside men. You will not, therefore, be able to prove any contradiction between *Moses* and my notions, unless you first shew, there was no other order of finite created spirits in being before man. I say farther, in case we conceive the creation, as we should at this time a parcel of plants or vegetables of all sorts, produced by an invisible power, in a desert where nobody was present: that this way of explaining or conceiving it, is consistent with my principles, since they deprive you of nothing either sensible, or imaginable: that it exactly suits with the common, natural, undebauched notions of mankind: that it manifests the dependence of all things on God; and, consequently, has all the good effect or influence, which it is possible that important article of our faith shou'd have, in making men humble, thankful, and resigned to their Creator. I say, moreover, that in this naked conception of things, divested of words, there will not be found any notion of what you call the *actuality of absolute existence*. You may, indeed, raise a dust with those terms, and so lengthen our dispute to no purpose. But I intreat you calmly to look into your own thoughts, and then tell me, if they are not a useless and unintelligible jargon.

Hyl. I own, I have no very clear notion annexed to them. But, what say you to this? Do you not make the existence of sensible things consist in their being in a mind? And, were not all things eternally in the mind of God? Did they not therefore exist from all eternity, according to you? And how cou'd that, which was eternal, be created in time? Can anything be clearer or better connected than this?

Phil. And, are not you too of opinion, that God knew all things from eternity?

Hyl. I am.

Phil. Consequently, they always had a being in the Divine intellect.

Hyl. This I acknowledge.

Phil. By your own confession, therefore, nothing is new, or begins to be, in respect of the mind of God. So we are agreed in that point.

Hyl. What shall we make then of the creation?

Phil. May we not understand it to have been intirely in respect of finite spirits; so that things, with regard to us, may properly be said to begin their existence, or be created, when God decreed they should become perceptible to intelligent creatures, in that order and manner which He then establish'd, and we now call the laws of nature? You may call this a *relative*, or *hypothetical existence*, if you please. But, so long as it supplies us with the most natural, obvious, and literal sense of the Mosaic history of the creation; so long as it answers all the religious ends of that great article; in a word, so long as you can assign no other sense or meaning in its stead; why should we reject this? Is it to comply with a ridiculous, sceptical humor, of making everything nonsense and unintelligible? I am sure, you cannot say, it is for the glory of God. For, allowing it to be a thing possible, and conceivable, that the corporeal world shou'd have an absolute subsistence, extrinsical to the mind of God, as well as to the minds of all created spirits: yet, how cou'd this set forth either the immensity or omniscience of the Deity, or the necessary and immediate dependence of all things on Him? Nay, wou'd it not rather seem to derogate from those attributes?

Hyl. Well, but as to this decree of God's, for making things perceptible: what say you, *Phlionous*, is it not plain, God did either execute that decree from all eternity, or, at some certain time, began to will what He had not actually willed before, but only designed to will. If the former, then there cou'd be no creation or beginning of existence in finite things. If the latter, then we must acknowledge something new to befall the Deity; which implies a sort of change: and all change argues imperfection.

Phil. Pray, consider what you are doing. Is it not evident this objection concludes equally against a creation in any sense; nay, against every other act of the Deity, discoverable by the light of nature: None of which can we conceive, otherwise than as performed in time, and having a beginning? God is a Being of tran-

scendent and unlimited perfections: His Nature, therefore, is incomprehensible to finite spirits. It is not, therefore, to be expected, that any man, whether *materialist* or *immaterialist*, should have exactly just notions of the Deity, His attributes, and ways of operation? If then you wou'd infer anything against me, your difficulty must not be drawn from the inadequateness of our conceptions of the Divine nature, which is unavoidable on any scheme; but from the denial of Matter, of which there is not one word, directly or indirectly, in what you have now objected.

Hyl. I must acknowledge, the difficulties you are concerned to clear, are such only as arise from the nonexistence of matter, and are peculiar to that notion. So far you are in the right. But I cannot by any means bring myself to think, there is no such peculiar repugnancy between the creation and your opinion: tho, indeed, where to fix it, I do not distinctly know.

Phil. What wou'd you have! Do I not acknowledge a twofold state of things? the one ectypal or natural, the other archetypal and eternal. The former was created in time; the latter existed from everlasting, in the mind of God. Is not this agreeable to the common notions of divines? Or, is any more than this necessary, in order to conceive the creation? But you suspect some peculiar repugnancy, tho' you know not where it lies. To take away all possibility of scruple in the case, do but consider this one point. Either you are not able to conceive the creation on any hypothesis whatsoever: and, if so, there is no ground for dislike or complaint against any particular opinion, on that score: or you are able to conceive it; and, if so, why not on my principles, since thereby nothing conceivable is taken away? You have all along been allowed the full scope of sense, imagination, and reason. Whatever, therefore, you cou'd before apprehend, either immediately or mediately, by your senses, or by ratiocination from your senses; whatever you cou'd perceive, imagine, or understand, remains still with you. If, therefore, the notion you have of the creation, by other principles, be intelligible, you have it still upon mine; if it be not intelligible, I conceive it to be no notion at all; and so there is no loss of it. And indeed, it seems to me very plain, that the supposition of matter, *i.e.* a thing perfectly unknown and inconceivable, cannot serve to make us conceive any thing. And, I hope, it need not be proved to you, that if the existence of matter does not make the creation con-

ceivable, the creation's being without it inconceivable, can be no objection against its nonexistence.

Hyl. I confess, *Philonous*, you have almost satisfied me in this point of the creation.

Phil. I would fain know why you are not quite satisfied. You tell me, indeed, of a repugnancy between the *Mosaic* history and immaterialism: but you know not where it lies. Is this reasonable, *Hylas*? Can you expect I shou'd solve a difficulty without knowing what it is. But, to pass by all that, wou'd not a man think you were assured there is no repugnancy between the received notions of materialists and the inspired writings?

Hyl. And so I am.

Phil. Ought the historical part of Scripture to be understood in a plain, obvious sense, or in a sense which is metaphysical, and out of the way?

Hyl. In the plain sense, doubtless.

Phil. When *Moses* speaks of herbs, earth, water, &c., as having been created by God; think you not, the sensible things commonly signified by those words, are suggested to every unphilosophical reader?

Hyl. I cannot help thinking so.

Phil. And are not all ideas, or things perceived by sense, to be denied a real existence by the doctrine of the materialist?

Hyl. This I have already acknowledged.

Phil. The creation, therefore, according to them, was not the creation of things sensible, which have only a relative being, but of certain unknown natures, which have an absolute being, wherein creation might terminate.

Hyl. True.

Phil. Is it not, therefore, evident, the assertors of matter destroy the plain, obvious sense of *Moses*, with which their notions are utterly inconsistent; and, instead of it, obtrude on us I know not what; something equally unintelligible to themselves and me?

Hyl. I cannot contradict you.

Phil. *Moses* tells us of a creation. A creation of what? of unknown quiddities, of occasions, or *substratums*? No, certainly; but of things obvious to the senses. You must first reconcile this with your notions, if you expect I shou'd be reconciled to them.

Hyl. I see, you can assault me with my own weapons.

Phil. Then, as to *absolute existence*; was there ever known a more jejune notion than that? Something it is, so abstracted and unintelligible, that you have frankly owned, you cou'd not conceive it, much less, explain anything by it. But allowing matter to exist, and the notion of absolute existence to be as clear as light; yet, was this ever known to make the creation more credible? Nay, has it not furnished the *atheists* and *infidels* of all ages with the most plausible arguments against a creation? That a corporeal substance, which hath an absolute existence, without the minds of spirits, shou'd be produced out of nothing, by the mere will of a Spirit, has been looked upon as a thing so contrary to all reason, so impossible and absurd, that not only the most celebrated among the ancients, but even divers modern and Christian philosophers have thought matter co-eternal with the Deity. Lay these things together, and then judge you, whether materialism disposes men to believe the creation of things.

Hyl. I own, *Philonous*, I think it does not. This of the *creation* is the last objection I can think of; and I must needs own, it has been sufficiently answered as well as the rest. Nothing now remains to be overcome, but a sort of unaccountable backwardness that I find in myself toward your notions.

Phil. When a man is swayed, he knows not why, to one side of the question; can this, think you, be anything else but the effect of prejudice, which never fails to attend old and rooted notions? And, indeed, in this respect, I cannot deny the belief of Matter to have very much the advantage over the contrary opinion, with men of a learned education.

Hyl. I confess, it seems to be as you say.

Phil. As a balance, therefore, to this weight of prejudice, let us throw into the scale the great advantages that arise from the belief of immaterialism, both in regard to religion and human learning. The being of a God, and incorruptibility of the soul, those great articles of religion, are they not proved with the clearest and most immediate evidence? When I say the being of a *God*, I do not mean an obscure, general cause of things, whereof we have no conception, but *God*, in the strict and proper sense of the word; a Being whose spirituality, omnipresence, providence, omniscience, infinite power and goodness, are as conspicuous as the existence of sensible things, of which (notwithstanding the fallacious pretences and affected

scruples of sceptics) there is no more reason to doubt, than of our own being. Then, with relation to humane sciences; in Natural Philosophy, what intricacies, what obscurities, what contradictions, has the belief of matter led men into! To say nothing of the numberless disputes about its extent, continuity, homogeneity, gravity, divisibility, &c. do they not pretend to explain all things by bodies operating on bodies, according to the laws of motion? and yet, are they able to comprehend, how one body should move another? Nay, admitting there was no difficulty, in reconciling the notion of an inert being with a cause; or in conceiving, how an accident might pass from one body to another; yet, by all their strained thoughts and extravagant suppositions, have they been able to reach the mechanical production of any one animal or vegetable body? Can they account, by the laws of motion, for sounds, tastes, smells, or colours, or for the regular course of things? In fine, have they accounted, by physical principles, for the aptitude and contrivance, even of the most inconsiderable parts of the universe? But, laying aside Matter and corporeal causes, and admitting only the efficiency of an all-perfect mind, are not all the effects of nature easy and intelligible? If the *phaenomena* are nothing else but *ideas*; God is a *spirit*, but matter an unintelligent, unperceiving being. If they demonstrate an unlimited power in their cause; God is active and omnipotent, but matter an inert mass. If the order, regularity, and usefulness of them, can never be sufficiently admired; God is infinitely wise and provident, but matter destitute of all contrivance and design. These, surely, are great advantages in *physics*. Not to mention, that the apprehension of a distant Deity, naturally disposes men to a negligence of their *moral* actions, which they wou'd be more cautious of, in case they thought him immediately present, and acting on their minds without the interposition of matter, or unthinking second causes. Then in *metaphysics*; what difficulties concerning entity in abstract, substantial forms, hylarchic principles, plastic natures, subjects and adjuncts, principle of individuation, possibility of matter's thinking, origine of ideas, the manner how two independent substances, so widely different as *spirit* and *matter*, shou'd mutually operate on each other? What difficulties, I say, and endless disquisitions concerning these, and innumerable other the like points, do we escape, by supposing only spirits and ideas? Even the *mathematics* themselves, if we

take away the absolute existence of extended things, become much more clear and easy; the most shocking paradoxes and intricate speculations, in those sciences, depending on the infinite divisibility of finite extension, which depends on that supposition. But what need is there to insist on the particular sciences: is not that opposition to all science whatsoever, that frenzy of the ancient and modern *sceptics* built on the same foundation? Or, can you produce so much as one argument against the reality of corporeal things, or in behalf of that avowed utter ignorance of their natures, which does not suppose their reality to consist in an external, absolute existence? Upon this supposition, indeed, the objections from the change of colours in a pigeon's neck, or the appearances of the broken oar in the water, must be allowed to have weight. But these, and the like objections, vanish, if we do not maintain the being of absolute, external originals, but place the reality of things in ideas, fleeting, indeed, and changeable; however, not changed at random, but according to the fixed order of nature. For, herein consists that constancy and truth of things, which secures all the concerns of life, and distinguishes that which is *real* from the irregular visions of the fancy.

Hyl. I agree to all you have now said, and must own, that nothing can incline me to embrace your opinion, more than the advantages I see it is attended with. I am by nature lazy; and this wou'd be a mighty abridgment in knowlege. What doubts, what hypotheses, what labyrinths of amusement, what fields of disputation, what an ocean of false learning, may be avoided by that single notion of *immaterialism*?

Phil. After all, is there any thing farther remaining to be done? You may remember, you promised to embrace that opinion which upon examination shou'd appear most agreeable to common sense, and remote from scepticism. This, by your own confession, is that which denies matter, or the absolute existence of corporeal things. Nor is this all; the same notion has been proved several ways, viewed in different lights, pursued in its consequences, and all objections against it cleared. Can there be a greater evidence of its truth? or, is it possible, it shou'd have all the marks of a true opinion, and yet be false?

Hyl. I own myself intirely satisfied, for the present, in all respects. But what security can I have, that I shall still continue

the same full assent to your opinion, and that no unthought-of objection or difficulty will occur hereafter?

Phil. Pray, *Hylas*, do you in other cases, when a point is once evidently proved, withhold your assent on account of objections or difficulties it may be liable to? Are the difficulties that attend the doctrine of incommensurable quantities, of the angle of contact, of the asymptotes to curves, or the like, sufficient to make you hold out against mathematical demonstration? Or, will you disbelieve the Providence of God, because there may be some particular things which you know not how to reconcile with it? If there are difficulties attending immaterialism, there are at the same time direct and evident proofs of it. But, for the existence of matter, there is not one proof, and far more numerous and insurmountable objections lie against it. But where are those mighty difficulties you insist on? Alas! you know not where, or what they are; something which may possibly occur hereafter. If this be a sufficient pretence for withholding your full assent, you shou'd never yield it to any proposition, how free soever from exceptions, how clearly and solidly soever demonstrated.

Hyl. You have satisfied me, *Philonous*.

Phil. But, to arm you against all future objections, do but consider, that which bears equally hard on two contradictory opinions, can be proof against neither. Whenever, therefore, any difficulty occurs, try if you can find a solution for it on the hypothesis of the *materialists*. Be not deceived by words; but sound your own thoughts. And in case you cannot conceive it easier by the help of *materialism*, it is plain it can be no objection against *immaterialism*. Had you proceeded all along by this rule, you wou'd probably have spared yourself abundance of trouble in objecting; since, of all your difficulties, I challenge you to shew one that is explained by matter: nay, which is not more unintelligible with than without that supposition, and consequently makes rather *against* than *for* it. You shou'd consider, in each particular, whether the difficulty arises from the *non-existence of matter*. If it does not, you might as well argue from the infinite divisibility of extension against the divine prescience, as from such a difficulty against *immaterialism*. And, yet, upon recollection, I believe, you will find this to have been often, if not always, the case. You shou'd, likewise, take heed not to argue on a *petitio principii*. One

is apt to say, the unknown substances ought to be esteemed real things, rather than the ideas in our minds: and, who can tell but the unthinking external substance may concur, as a cause or instrument in the productions of our ideas? But is not this, proceeding on a supposition that there are such external substances? And to suppose this, is it not begging the question? But, above all things, you shou'd beware of imposing on yourself, by that vulgar sophism which is called *ignoratio elenchi*. You talked often, as if you thought I maintained the non-existence of sensible things: whereas, in truth, no one can be more thorowly assured of their existence than I am: and it is you who doubt; I shou'd have said, positively deny it. Everything that is seen, felt, heard, or any way perceived by the senses, is, on the principles I embrace, a real being, but not on yours. Remember, the matter you contend for, is an unknown somewhat (if, indeed, it may be termed *somewhat*), which is quite stripped of all sensible qualities, and can neither be perceived by sense, nor apprehended by the mind. Remember, I say, that it is not any object which is hard or soft, hot or cold, blue or white, round or square, &c. For all these things, I affirm, do exist. Tho, indeed, I deny, they have an existence distinct from being perceived; or, that they exist out of all minds whatsoever. Think on these points; let them be attentively considered, and still kept in view. Otherwise, you will not comprehend the state of the question; without which, your objections will always be wide of the mark, and, instead of mine, may possibly be directed (as more than once they have been) against your own notions.

Hyl. I must needs own, *Philonous*, nothing seems to have kept me from agreeing with you, more than this same *mistaking the question*. In denying matter, at first glimpse I am tempted to imagine, you deny the things we see and feel: but, upon reflexion, find there is no ground for it. What think you, therefore, of retaining the name *matter*, and applying it to *sensible things*? This may be done without any change in your sentiments; and, believe me, it wou'd be a means of reconciling them to some persons, who may be more shocked at an innovation in words, than in opinion.

Phil. With all my heart: retain the word *matter*, and apply it to the objects of sense, if you please; provided you do not attribute to them any subsistence distinct from their being perceived. I shall never quarrel with you for an expression. *Matter*, or *material sub-*

stance, are terms introduced by philosophers; and, as used by them, imply a sort of independency, or a subsistence distinct from being perceived by a mind: but, are never used by common people; or, if ever, it is to signify the immediate objects of sense. One wou'd think, therefore, so long as the names of all particular things, with the terms *sensible*, *substance*, *body*, *stuff*, and the like, are retained, the word *matter* should be never missed in common talk. And, in philosophical discourse, it seems the best way to leave it quite out: since there is not, perhaps, any one thing that hath more favoured and strengthened the depraved bent of the mind toward atheism, than the use of that general confused term.

Hyl. Well but, *Philonous*, since I am content to give up the notion of an unthinking substance exterior to the mind, I think you ought not to deny me the privilege of using the word *matter* as I please, and annexing it to a collection of sensible qualities subsisting only in the mind. I freely own, there is no other substance, in a strict sense, than *spirit*. But I have been so long accustomed to the term *matter*, that I know not how to part with it. To say, there is no *matter* in the world, is still shocking to me. Whereas, to say, there is no *matter*, if, by that term be meant, an unthinking substance existing without the mind: but if by *matter* is meant some sensible thing, whose existence consists in being perceived, then there is *matter*. This distinction gives it quite another turn: and men will come into your notions, with small difficulty, when they are proposed in that manner. For, after all, the controversy about *matter* in the strict acceptation of it, lies together between you and the philosophers: whose principles, I acknowledge, are not near so natural, or so agreeable to the common sense of mankind, and Holy Scripture, as yours. There is nothing we either desire or shun, but as it makes, or is apprehended to make, some part of our happiness or misery. But what hath happiness, or misery, joy or grief, pleasure or pain, to do with absolute existence; or with unknown entities, abstracted from all relation to us? It is evident, things regard us only as they are pleasing or displeasing: and they can please or displease, only so far forth as they are perceived. Farther, therefore, we are not concerned; and thus far, you leave things as you found them. Yet, still there is something new in this doctrine. It is plain, I do not now think with the philosophers, nor yet altogether with the vulgar. I wou'd know how the

case stands in that respect: precisely, what you have added to, or altered in my former notions.

Phil. I do not pretend to be a setter-up of new notions. My endeavours tend only to unite and place in a clearer light, that truth which was before shared between the vulgar and the philosophers: the former being of opinion, that *those things they immediately perceive are the real things*; and the latter, that *the things immediately perceived are ideas which exist only in the mind*. Which two notions, put together, do, in effect, constitute the substance of what I advance.

Hyl. I have been a long time distrusting my senses; methought I saw things by a dim light, and through false glasses. Now, the glasses are removed, and a new light breaks in upon my understanding. I am clearly convinced, that I see things in their native forms; and am no longer in pain about their *unknown natures*, or *absolute existence*. This is the state I find myself in at present: tho', indeed, the course that brought me to it, I do not yet thoroughly comprehend. You set out upon the same principles, that *Academics*, *Cartesians*, and the like sects, usually do, and, for a long time, it looked as if you were advancing their philosophical scepticism; but, in the end, your conclusions are directly opposite to theirs.

Phil. You see, *Hylas*, the water of yonder fountain, how it is forced upwards, in a round column, to a certain height; at which it breaks, and falls back into the basin from whence it rose: its ascent, as well as descent, proceeding from the same uniform law or principle of *gravitation*. Just so, the same principles which, at first view, lead to scepticism, pursued to a certain point, bring men back to common sense.

CHAPTER II

DAVID HUME

Hume was born at Edinburgh in 1711, was brought up, at the family home at Ninewells, in the rigid Calvinism of the Scottish church, and received his formal education at the University of Edinburgh. He read extensively in modern and to some degree in ancient philosophers and devoted himself with such concentration to these philosophic labors that he soon fell seriously ill. Three years' retirement in France, however (preceded by a brief excursion into commerce at Bristol), enabled him to finish the work he had conceived. But when his *Treatise of Human Nature* appeared in 1739, it fell, as he says, "dead born from the Press." Later in the *Enquiry concerning Human Understanding* Hume tried to restate his doctrines in more acceptable form. A post as librarian to the Advocates' Library in Edinburgh gave him an opportunity to write his *Histories of England*; and it was as the author of these "belles histoires" rather than of his philosophical works that he was hailed when he visited Paris in 1763-65. Hume died in Edinburgh in 1776. Chief philosophical works: *A Treatise of Human Nature* (1739, 1740); *Essays Moral Political and Literary* (1741, 1742); *Philosophical essays concerning Human Understanding* (1748); *Enquiry concerning the Principles of Morals* (1751); *Political Discourses* (1752); *Four Dissertations* (including the *Natural History of Religion* [1757]); *Two Essays* (published posthumously in 1777); *Dialogues concerning Natural Religion* (published posthumously in 1779). Suggested readings: *Treatise of Human Nature* ("Everyman's" ed. [New York, 1928]); *Dialogues concerning Natural Religion*, ed. Norman Kemp Smith (Oxford, 1935 [the *Dialogues* are included in the Scribner selections (ed. Hendel) and in the "Modern Library's" *British Philosophy* (ed. Burt)]); *Enquiry concerning Human Understanding* (Chicago, 1930); *Enquiry concerning the Principles of Morals* (Chicago, 1930); *Essays Moral Political and Literary*, in "Oxford World Classics" (out of print); *Letters*, ed. J. Y. T. Grieg (Oxford, 1932). R. W. Church, *Hume's Theory of the Understanding* (Ithaca, 1935); J. Y. T. Grieg, *David Hume* (New York, 1931); R. M. Laing, *David Hume* (London, 1934); John Laird, *Hume's Philosophy of Human Nature* (New York, 1932); Constance Maund, *Hume's Theory of Knowledge* (London, 1937); G. E. Moore, *Philosophical Studies* (New York, 1922 [includes a chapter on Hume]); C. R. Morris, *Locke, Berkeley, Hume* (Oxford, 1931); C. W. Morris, *Six Theories of Mind* (Chicago, 1932), chap. i; Norman Kemp Smith's edition of *Dialogues* (see above), also "The Naturalism of Hume," in *Mind*, Vol. XIV (new ser., 1905). For the Scottish philosophy see G. A. Johnston, *Selections from the Scottish Philosophy* (Chicago, 1915).

IF ONE sets Hume's *Dialogues concerning Natural Religion* beside Berkeley's *Alciphron*, one is tempted to say that Hume's purpose in philosophizing is the converse of Berkeley's: that is, the defense of freethinkers against the Christian religion. And, in fact, against the back-

ground of a strict Scottish-Calvinist upbringing, a distrust of religion does to a certain degree determine the direction of Hume's thought. For it is his strong conviction that "superstition" and "enthusiasm," as they occur chiefly in organized religion, constitute the twin roots of much of the evil to which mankind subjects itself. To clear away such misguided and misguiding attitudes would seem to be one of the chief tasks of the philosopher. Hume's conviction on this score is most pertinent, of course, to such works as the chapter "Of Miracles" in the *Enquiry* or the *Dialogues concerning Natural Religion* (where he displays a magnificent array of arguments against both theistic and deistic believers in a benevolent and all-wise deity). But, at least by analogy, a distrust of superstition and enthusiasm, more extreme in its consequences than Locke's parallel dislike of enthusiasts, may be said to form a central element in the background of Hume's philosophy as a whole.¹

In the first book of his *Treatise of Human Nature* Hume renews the challenge to knowledge on the question of its source in experience. He distinguishes between impressions (that is, either sensations or such immediate feelings as those of pleasure and pain, which he calls impressions of reflection) and ideas (that is, the fainter copies of impressions in imagination). It is his cardinal principle that all simple ideas can be traced to simple impressions as their source. Carrying to its extreme, moreover, as Berkeley did, the concept of ideas as particular and separate images, he agrees with Berkeley in denying the existence of abstract ideas. He likewise applies to mind the criticism Berkeley had leveled only at matter. For applying to the idea of substance the principle of tracing all ideas to corresponding impressions, he finds no such im-

¹ Some critics have given Hume's attitude toward religion a more conservative color. For definitive refutation of their arguments see Norman Kemp Smith's introduction to the *Dialogues* (Oxford, 1935); and note the full context of Hume's letter to Gilbert Elliott (Letter 72 in *Letters of David Hume*, ed. J. Y. T. Grieg [Oxford, 1932], I, 153-57), which is cited in support of their position.

pression to legitimate the idea; and he therefore throws overboard both substances, mental as well as corporeal.

But it is a question beyond either of these that comes to constitute Hume's central problem. Berkeley had analyzed knowledge as predictive—that is, as a process of observing the order among ideas rather than as a penetration into something behind them. His later suggestion about notions of relations, too, indicates that there is something especially crucial for knowledge about the connections between ideas as distinct from separate ideas themselves. It is the validity of just such connections that Hume questions in the third part of Book I of the *Treatise*. According to the definition of knowledge Hume inherited, knowledge consists of a system of ideas whose informational value is absolutely certain for all men at all times. According to another aspect of the Lockian tradition, however, all our ideas must be validated by reference to their origin in experience. Equally according to this tradition as Hume understood it, our ideas (or, for him, our impressions) are separate little bits of perception that can always be extracted from the complex ideas they compose—just as the bits of a mosaic fit together yet are separable from the picture they form. But how out of the separate bits which are the only legitimate contents of knowledge do we get the ideal system of more than mosaic unity that is defined as knowledge? How, in other words, can generalization from the atoms of experience give us a secure superstructure of knowledge both rationally certain and empirically derived? There are, of course, relations between ideas which do attain to certainty, namely, the propositions of mathematics, or at least of arithmetic. That is so, however, only because such propositions make no assertions about real connections among real things. They assert only relations between ideas implicit in those ideas themselves regardless of the question whether such things as the ideas represent actually exist or no. But when the mind asserts as representative of the real world relations between ideas

not necessarily contained in the ideas themselves, the situation becomes problematic. Consistently with the procedure of the Lockian "historical" method, can such assertions be justified? Hume puts the question, specifically, in terms of one relation, cause and effect; but his problem is ultimately that of empirical generalizations as such, causal generalizations being the most important instance of the type.

His negative answer is notorious. The fundamental idea in the relation of causality is that of necessary connection. (The other constituents, resemblance and contiguity, present no difficulty.) Hume looks everywhere for the external impression from which such an idea originates. He fails to find any. Ergo the idea is illusory, the notion of causality, like that of substance, cannot be empirically validated, and so, on rational demands, must go. Such is Hume's skepticism. But like the "horrid atheism" of which he himself accuses Spinoza, Hume's skepticism thus stated is almost as much legend as reality. Hume does, indeed, conclude that causal generalizations cannot be rationally justified. That does not mean, however, that we must throw out the propositions of science and common sense, any more than the fictional character of the idea of substance means a failure to believe in the "reality of the external world." Nature, says Hume, has by an uncontrollable necessity determined us to judge as well as to breathe and feel. Nature, by her most powerful guide of human action, custom, with its effect on the most powerful of human faculties, imagination, has determined us to pass from past connections to predictions about future ones; and as practical men we are justified in acting as nature bids us, even though speculatively we find no rational, systematic validation for our beliefs. Hume's view is ultimately not *no* belief, but belief based on habit and imagination rather than on rational grounds.

A similar emphasis characterizes Hume's treatment of morals in Book III of the *Treatise*. In opposition to such moralists as Clarke and Cudworth, who declared that the

rightness of an action could be determined by deduction from principles rationally intuited, Hume emphasized the impotence of reason to determine any action apart from the motivating force of the passions. And the direction of the passions themselves is determined more largely by imagination and the association of ideas than by rational considerations. In questions of conduct, therefore, "reason is and ought to be the slave of the passions." What we are really talking about, on the other hand, when we say that "reason" controls the passions is "nothing but a general calm determination of the passions founded on a distant view or reflection." It is, finally, in such a "calm determination" with its "distant view" that we discover the kind of approving and disapproving sense that is specifically moral. Thus "it is only when a character is considered in general, without reference to our particular interest, that it causes such a feeling or sentiment as denominates it morally good or evil." Morality, therefore, originates in sentiment rather than in reason: in something akin to our sentiment of sympathy toward those whose interests are close to ours and whose feelings we can easily imagine, but in a sympathy generalized away from the determination by particular interests and toward a reference to humanity as such. But, on the other hand, such a generalized sympathy is not by any means our everyday feeling toward our neighbors and remote neighbors. Imagination—and hence feeling—is confined at most times to closer range. So when he examines political virtues like justice, Hume thinks a motive of universal benevolence or "public interest" too broad to be psychologically correct. We *approve* justice because it gives pleasure through the force of sympathy; but that force is not strong enough by nature to account for the original motive behind justice itself. Hume therefore adopts the explanation of justice as conventional. The institutions on which it rests, like property and contract, are contrived by human artifice with a

view to making it possible for men to live peaceably together. And the interest of *each* man, not only abstractly of *all*, is back of the original establishment of these institutions, and thus of their corresponding artificial virtue, justice. Yet the moral approval of justice, now long accustomed, ultimately looks as natural to us as our pleasure in natural virtues like generosity, humanity, etc. The virtues are different; but the judgment of them has in both cases its origin in sympathy—that is, in a sympathy extended somewhat farther than usual in its range. Through this double use of the concepts of nature and artifice, interest and public good, Hume sets up something not unlike Bentham's utilitarianism. But for Bentham every man is always seeking his own pleasure only, while the good, in sharp contrast, is the total pleasure of all. So we have a motive necessarily selfish and a good necessarily universal—and hence never actually sought after, or even, one would think, approved by any actual person. Hume leaves a more pliable psychological basis for his system by introducing sympathy as a principle varying gradually in range from null outward toward all humanity, and accounting in its wider ranges for what we call moral judgments and virtuous acts.

Hume's positive influence in his own day was slight. The "Scottish philosophy," founded by Thomas Reid (1710-96), based its so-called "common-sense" system on an analysis of mind which purported to refute Hume's "skepticism." Still, one signal instance of Hume's influence may have occurred through the medium of these very refutations. Kant attributes his "awakening from his dogmatic slumber" to the stimulus of Hume's arguments on causality; and it is possible that Kant first met those arguments, as they occur in the *Treatise*, through their restatement by the common-sense philosopher James Beattie (1735-1803).²

² See Norman Kemp Smith's commentary on Kant's *Critique of Pure Reason*, p. xxviii.

SELECTIONS FROM *A TREATISE OF
HUMAN NATURE*³

INTRODUCTION

Nothing is more usual and more natural for those, who pretend to discover anything new to the world in philosophy and the sciences, than to insinuate the praises of their own systems, by decrying all those, which have been advanced before them. And indeed were they content with lamenting that ignorance, which we still lie under in the most important questions, that can come before the tribunal of human reason, there are few, who have an acquaintance with the sciences, that would not readily agree with them. 'Tis easy for one of judgment and learning, to perceive the weak foundation even of those systems, which have obtained the greatest credit, and have carried their pretensions highest to accurate and profound reasoning. Principles taken upon trust, consequences lamely deduced from them, want of coherence in the parts, and of evidence in the whole, these are every where to be met with in the systems of the most eminent philosophers, and seem to have drawn disgrace upon philosophy itself.

Nor is there requir'd such profound knowledge to discover the present imperfect condition of the sciences, but even the rabble without doors may judge from the noise and clamour, which they hear, that all goes not well within. There is nothing which is not the subject of debate, and in which men of learning are not of contrary opinions. The most trivial question escapes not our controversy, and in the most momentous we are not able to give any certain decision. Disputes are multiplied, as if every thing was uncertain; and these disputes are managed with the greatest warmth, as if every thing was certain. Amidst all this bustle 'tis not reason, which carries the prize, but eloquence; and no man needs ever despair of gaining proselytes to the most extravagant hypothesis, who has art enough to represent it in any favourable colours. The victory is not gained by the men at arms, who manage the pike and the sword; but by the trumpeters, drummers, and musicians of the army.

From hence in my opinion arises that common prejudice against

³ *A Treatise of Human Nature*, ed. T. H. Green and T. H. Grose (London, 1874).

metaphysical reasonings of all kinds, even amongst those, who profess themselves scholars, and have a just value for every other part of literature. By metaphysical reasonings, they do not understand those of any particular branch of science, but every kind of argument, which is any way abstruse, and requires some attention to be comprehended. We have so often lost our labour in such researches, that we commonly reject them without hesitation, and resolve, if we must for ever be a prey to errors and delusions, that they shall at least be natural and entertaining. And indeed nothing but the most determined scepticism, along with a great degree of indolence, can justify this aversion to metaphysics. For if truth be at all within the reach of human capacity, 'tis certain it must lie very deep and abstruse; and to hope we shall arrive at it without utmost pains, must certainly be esteemed sufficiently vain and presumptuous. I pretend to no such advantage in the philosophy I am going to unfold, and would esteem it a strong presumption against it, were it so very easy and obvious.

'Tis evident, that all the sciences have a relation, greater or less, to human nature; and that however wide any of them may seem to run from it, they still return back by one passage or another. Even *Mathematics, Natural Philosophy, and Natural Religion*, are in some measure dependent on the science of MAN; since they lie under the cognizance of men, and are judged of by their powers and faculties. 'Tis impossible to tell what changes and improvements we might make in these sciences were we thoroughly acquainted with the extent and force of human understanding, and cou'd explain the nature of the ideas we employ, and of the operations we perform in our reasonings. And these improvements are the more to be hoped for in natural religion, as it is not content with instructing us in the nature of superior powers, but carries its views farther, to their disposition towards us, and our duties towards them; and consequently we ourselves are not only the beings, that reason, but also one of the objects, concerning which we reason.

If therefore the sciences of Mathematics, Natural Philosophy, and Natural Religion, have such a dependence on the knowledge of man, what may be expected in the other sciences, whose connexion with human nature is more close and intimate? The sole end of logic is to explain the principles and operations of our

reasoning faculty, and the nature of our ideas: morals and criticism regard our tastes and sentiments: and politics consider man as united in society, and dependent on each other. In these four sciences of *Logic, Morals, Criticism, and Politics*, is comprehended almost everything, which it can any way import us to be acquainted with, or which can tend either to the improvement or ornament of the human mind.

Here then is the only expedient, from which we can hope for success in our philosophical researches, to leave the tedious lingering method, which we have hitherto followed, and instead of taking now and then a castle or village on the frontier, to march up directly to the capital or center of these sciences, to human nature itself; which being once masters of, we may every where else hope for an easy victory. From this station we may extend our conquests over all those sciences, which more intimately concern human life, and may afterwards proceed at leisure to discover more fully those, which are the objects of pure curiosity. There is no question of importance, whose decision is not compriz'd in the science of man; and there is none, which can be decided with any certainty, before we become acquainted with that science. In pretending, therefore, to explain the principles of human nature, we in effect propose a compleat system of the sciences, built on a foundation almost entirely new, and the only one upon which they can stand with any security.

And as the science of man is the only solid foundation for the other sciences, so the only solid foundation we can give to this science itself must be laid on experience and observation. 'Tis no astonishing reflection to consider, that the application of experimental philosophy to moral subjects should come after that to natural at the distance of above a whole century; since we find in fact, that there was about the same interval betwixt the origins of these sciences; and that reckoning from THALES to SOCRATES, the space of time is nearly equal to that betwixt my Lord Bacon and some late philosophers in *England*,⁴ who have begun to put the science of man on a new footing, and have engaged the attention, and excited the curiosity of the public. So true it is, that however other nations may rival us in poetry, and excel us in some other

⁴ Mr. *Locke*, my Lord *Shaftsbury*, Dr. *Mandeville*, Mr. *Hutchinson*, Dr. *Butler*, &c.

agreeable arts, the improvements in reason and philosophy can only be owing to a land of toleration and of liberty.

Nor ought we to think, that this latter improvement in the science of man will do less honour to our native country than the former in natural philosophy, but ought rather to esteem it a greater glory, upon account of the greater importance of that science, as well as the necessity it lay under of such a reformation. For to me it seems evident, that the essence of the mind being equally unknown to us with that of external bodies, it must be equally impossible to form any notion of its powers and qualities otherwise than from careful and exact experiments, and the observation of those particular effects, which result from its different circumstances and situations. And tho' we must endeavour to render all our principles as universal as possible, by tracing up our experiments to the utmost, and explaining all effects from the simplest and fewest causes, 'tis still certain we cannot go beyond experience; and any hypothesis, that pretends to discover the ultimate original qualities of human nature, ought at first to be rejected as presumptuous and chimerical.

I do not think a philosopher, who would apply himself so earnestly to the explaining the ultimate principles of the soul, would show himself a great master in that very science of human nature, which he pretends to explain, or very knowing in what is naturally satisfactory to the mind of man. For nothing is more certain, than that despair has almost the same effect upon us with enjoyment, and that we are no sooner acquainted with the impossibility of satisfying any desire, than the desire itself vanishes. When we see, that we have arrived at the utmost extent of human reason, we sit down contented, tho' we be perfectly satisfied in the main of our ignorance, and perceive that we can give no reason of our most general and most refined principles, beside our experience of their reality; which is the reason of the mere vulgar, and what it required no study at first to have discovered for the most particular and most extraordinary phaenomen. And as this impossibility of making any farther progress is enough to satisfy the reader, so the writer may derive a more delicate satisfaction from the free confession of his ignorance, and from his prudence in avoiding that error, into which so many have fallen, of imposing their conjectures and hypotheses on the world for the most certain principles.

When this mutual contentment and satisfaction can be obtained betwixt the master and the scholar, I know not what more we can require of our philosophy.

But if this impossibility of explaining ultimate principles should be esteemed a defect in the science of man, I will venture to affirm, that 'tis a defect common to it with all the sciences, and all the arts, in which we can employ ourselves, whether they be such as are cultivated in the schools of the philosophers, or practised in the shops of the meanest artizans. None of them can go beyond experience, or establish any principles which are not founded on that authority. Moral philosophy has, indeed, this peculiar disadvantage, which is not found in natural, that in collecting its experiments, it cannot make them purposely, with premeditation, and after such a manner as to satisfy itself concerning every particular difficulty which may arise. When I am at a loss to know the effects of one body upon another in any situation, I need only put them in that situation, and observe what results from it. But should I endeavour to clear up after the same manner any doubt in moral philosophy, by placing myself in the same case with that which I consider, 'tis evident this reflection and premeditation would so disturb the operation of my natural principles, as must render it impossible to form any just conclusion from the phaenomenon. We must therefore glean up our experiments in this science from a cautious observation of human life, and take them as they appear in the common course of the world, by men's behaviour in company, in affairs, and in their pleasures. Where experiments of this kind are judiciously collected and compared, we may hope to establish on them a science which will not be inferior in certainty, and will be much superior in utility to any other of human comprehension.

BOOK I. OF THE UNDERSTANDING

PART I. OF IDEAS, THEIR ORIGIN, COMPOSITION, CON- NEXION, ABSTRACTION, ETC.

SEC. I. *Of the Origin of Our Ideas*

All the perceptions of the human mind resolve themselves into two distinct kinds, which I shall call IMPRESSIONS and IDEAS. The difference betwixt these consists in the degrees of force and liveli-

ness, with which they strike upon the mind, and make their way into our thought or consciousness. Those perceptions, which enter with most force and violence, we may name *impressions*; and under this name I comprehend all our sensations, passions and emotions, as they make their first appearance in the soul. By *ideas* I mean the faint images of these in thinking and reasoning; such as, for instance, are all the perceptions excited by the present discourse, excepting only those which arise from the sight and touch and excepting the immediate pleasure or uneasiness it may occasion. I believe it will not be very necessary to employ many words in explaining this distinction. Every one of himself will readily perceive the difference betwixt feeling and thinking. The common degrees of these are easily distinguished; tho' it is not impossible but in particular instances they may very nearly approach to each other. Thus in sleep, in a fever, in madness, or in any very violent emotions of soul, our ideas may approach to our impressions: As on the other hand it sometimes happens, that our impressions are so faint and low, that we cannot distinguish them from our ideas. But notwithstanding this near resemblance in a few instances, they are in general so very different, that no-one can make a scruple to rank them under distinct heads, and assign to each a peculiar name to mark the difference.⁵

There is another division of our perceptions, which it will be convenient to observe, and which extends itself both to our impressions and ideas. This division is into SIMPLE and COMPLEX. Simple perceptions or impressions and ideas are such as admit of no distinction nor separation. The complex are the contrary to these, and may be distinguished into parts. Tho' a particular colour, taste, and smell, are qualities all united together in this apple, 'tis easy to perceive they are not the same, but are at least distinguishable from each other.

Having by these divisions given an order and arrangement to our objects, we may now apply ourselves to consider with the

⁵ I here make use of these terms, *impression and idea*, in a sense different from what is usual, and I hope this liberty will be allowed me. Perhaps I rather restore the word, *idea*, to its original sense, from which Mr. Locke had perverted it, in making it stand for our perceptions. By the term of *impression* I would not be understood to express the manner, in which our lively perceptions are produced in the soul, but merely the perceptions themselves; for which there is no particular name either in the *English* or any other language, that I know of.

more accuracy their qualities and relations. The first circumstance, that strikes my eyes, is the great resemblance betwixt our impressions and ideas in every other particular, except their degree of force and vivacity. The one seem to be in a manner the reflexion of the other; so that all the perceptions of the mind are double, and appear both as impressions and ideas. When I shut my eyes and think of my chamber, the ideas I form are exact representations of the impressions I felt; nor is there any circumstance of the one, which is not to be found in the other. In running over my other perceptions, I find still the same resemblance and representation. Ideas and impressions appear always to correspond to each other. This circumstance seems to me remarkable, and engages my attention for a moment.

Upon a more accurate survey I find I have been carried away too far by the first appearance, and that I must make use of the distinction of perceptions into *simple and complex*, to limit this general decision, *that all our ideas and impressions are resembling*. I observe, that many of our complex ideas never had impressions, that corresponded to them, and that many of our complex impressions never are exactly copied in ideas. I can imagine to myself such a city as the *New Jerusalem*, whose pavement is gold and walls are rubies, tho' I never saw any such. I have seen *Paris*; but shall I affirm I can form such an idea of that city, as will perfectly represent all its streets and houses in their real and just proportions?

I perceive, therefore, that tho' there is in general a great resemblance betwixt our *complex* impressions and ideas, yet the rule is not universally true, that they are exact copies of each other. We may next consider how the case stands with our *simple* perceptions. After the most accurate examination, of which I am capable, I venture to affirm, that the rule here holds without any exception, and that every simple idea has a simple impression, which resembles it, and every simple impression a correspondent idea. That idea of red, which we form in the dark, and that impression which strikes our eyes in sun-shine, differ only in degree, not in nature. That the case is the same with all our simple impressions and ideas, 'tis impossible to prove by a particular enumeration of them. Every one may satisfy himself in this point by running over as many as he pleases. But if any one should deny this uni-

versal resemblance, I know no way of convincing him, but by desiring him to shew a simple impression, that has not a correspondent idea, or a simple idea, that has not a correspondent impression. If he does not answer this challenge, as 'tis certain he cannot, we may from his silence and our own observation establish our conclusion.

Thus we find, that all simple ideas and impressions resemble each other; and as the complex are formed from them, we may affirm in general, that these two species of perception are exactly correspondent. Having discover'd this relation, which requires no farther examination, I am curious to find some other of their qualities. Let us consider how they stand with regard to their existence, and which of the impressions and ideas are causes, and which effects.

The *full* examination of this question is the subject of the present treatise; and therefore we shall here content ourselves with establishing one general proposition, *That all our simple ideas in their first appearance are deriv'd from simple impressions, which are correspondent to them, and which they exactly represent.*

In seeking for phaenomena to prove this proposition, I find only those of two kinds; but in each kind the phaenomena are obvious, numerous, and conclusive. I first make myself certain, by a new review, of what I have already asserted, that every simple impression is attended with a correspondent idea, and every simpler idea with a correspondent impression. From this constant conjunction of resembling perceptions I immediately conclude, that there is a great connexion betwixt our correspondent impressions and ideas, and that the existence of the one has a considerable influence upon that of the other. Such a constant conjunction, in such an infinite number of instances, can never arise from chance; but clearly proves a dependence of the impressions on the ideas, or of the ideas on the impressions. That I may know on which side this dependence lies, I consider the order of their *first appearance*; and find by constant experience, that the simple impressions always take the precedence of their correspondent ideas, but never appear in the contrary order. To give a child an idea of scarlet or orange, of sweet or bitter, I present the objects, or in other words, convey to him these impressions; but proceed not so absurdly, as to endeavour to produce the impressions by exciting the ideas. Our ideas upon their appearance produce not their correspondent im-

pressions, nor do we perceive any colour, or feel any sensation merely upon thinking of them. On the other hand, we find that any impression either of the mind or body is constantly followed by an idea, which resembles it, and is only different in the degrees of force and liveliness. The constant conjunction of our resembling perceptions, is a convincing proof, that the one are the causes of the other; and this priority of the impressions is an equal proof, that our impressions are the causes of our ideas, not our ideas of our impressions.

To confirm this I consider another plain and convincing phaenomenon; which is, that where-ever by any accident the faculties, which give rise to any impressions, are obstructed in their operations, as when one is born blind or deaf; not only the impressions are lost, but also their correspondent ideas; so that there never appear in the mind the least traces of either of them. Nor is this only true, where the organs of sensation are entirely destroy'd, but likewise where they have never been put in action to produce a particular impression. We cannot form to ourselves a just idea of the taste of a pine apple, without having actually tasted it.

There is however one contradictory phaenomenon, which may prove, that 'tis not absolutely impossible for ideas to go before their correspondent impressions. I believe it will readily be allow'd that the several distinct ideas of colours, which enter by the eyes, or those of sounds, which are convey'd by the hearing, are really different from each other, tho' at the same time resembling. Now if this be true of different colours, it must be no less so of the different shades of the same colour, that each of them produces a distinct idea, independent of the rest. For if this shou'd be deny'd, 'tis possible, by the continual gradation of shades, to run a colour insensibly into what is most remote from it; and if you will not allow any of the means to be different, you cannot without absurdity deny the extremes to be the same. Suppose therefore a person to have enjoyed his sight for thirty years, and to have become perfectly well acquainted with colours of all kinds, excepting one particular shade of blue, for instance, which it never has been his fortune to meet with. Let all the different shades of that colour except that single one, be plac'd before him, descending gradually from the deepest to the lightest; 'tis plain, that he will perceive a blank, where that shade is wanting, and will be sensible, that

there is a greater distance in that place betwixt the contiguous colours, than in any other. Now I ask, whether 'tis possible for him, from his own imagination, to supply this deficiency, and raise up to himself the idea of that particular shade, tho' it had never been conveyed to him by his senses? I believe there are few but will be of opinion that he can; and this may serve as a proof, that the simple ideas are not always derived from the correspondent impressions; tho' the instance is so particular and singular, that 'tis scarce worth our observing, and does not merit that for it alone we should alter our general maxim.

But, besides this exception, it may not be amiss to remark on this head, that the principle of the priority of impressions to ideas must be understood with another limitation, *viz.* that as our ideas are images of our impressions, so we can form secondary ideas, which are images of the primary; as appears from this very reasoning concerning them. This is not, properly speaking, an exception to the rule so much as an explanation of it. Ideas produce the images of themselves in new ideas; but as the first ideas are supposed to be derived from impressions, it still remains true, that all our simple ideas proceed either mediately or immediately from their correspondent impressions.

This then is the first principle I establish in the science of human nature; nor ought we to despise it because of the simplicity of its appearance. For 'tis remarkable, that the present question concerning the precedency of our impressions or ideas, is the same with what has made so much noise in other terms, when it has been disputed whether there be any innate ideas, or whether all ideas be derived from sensation and reflexion. We may observe, that in order to prove the ideas of extension and colour not to be innate, philosophers do nothing but shew that they are conveyed by our senses. To prove the ideas of passion and desire not to be innate, they observe that we have a preceding experience of these emotions in ourselves. Now if we carefully examine these arguments, we shall find that they prove nothing but that ideas are preceded by other more lively perceptions, from which they are derived, and which they represent. I hope this clear stating of the question will remove all disputes concerning it, and will render this principle of more use in our reasonings, than it seems hitherto to have been.

SEC. II. *Division of the Subject*

Since it appears, that our simple impressions are prior to their correspondent ideas, and that the exceptions are very rare, method seems to require we should examine our impressions, before we consider our ideas. Impressions may be divided into two kinds, those of SENSATION and those of REFLEXION. The first kind arises in the soul originally, from unknown causes. The second is derived in a great measure from our ideas, and that in the following order. An impression first strikes upon the senses, and makes us perceive heat or cold, thirst or hunger, pleasure or pain of some kind or other. Of this impression there is a copy taken by the mind, which remains after the impression ceases; and this we call an idea. This idea of pleasure or pain, when it returns upon the soul, produces the new impressions of desire and aversion, hope and fear, which may properly be called impressions of reflexion, because derived from it. These again are copies by the memory and imagination, and become ideas; which perhaps in their turn give rise to other impressions and ideas. So that the impressions of reflexion are only antecedent to their correspondent ideas; but posterior to those of sensation, and deriv'd from them. . . .

SEC. IV. *Of the Connexion or Association of Ideas*

As all simple ideas may be separated by the imagination, and may be united again in what form it pleases, nothing wou'd be more unaccountable than the operations of that faculty, were it not guided by some universal principles, which render it, in some measure, uniform with itself in all times and places. Were ideas entirely loose and unconnected, chance alone wou'd join them; and 'tis impossible the same simple ideas shou'd fall regularly into complex ones (as they commonly do) without some bond of union among them, some associating quality, by which one idea naturally introduces another. This uniting principle among ideas is not to be consider'd as an inseparable connexion; for that has been already excluded from the imagination: Nor yet are we to conclude, that without it the mind cannot join two ideas; for nothing is more free than that faculty: but we are only to regard it as a gentle force, which commonly prevails, and is the cause why, among other things, languages so nearly correspond to each other; nature

in a manner pointing out to every one those simple ideas, which are most proper to be united in a complex one. The qualities, from which this association arises, and by which the mind is after this manner convey'd from one idea to another, are three, *viz.* RESEMBLANCE, CONTIGUITY in time or place, and CAUSE and EFFECT.

I believe it will not be very necessary to prove, that these qualities produce an association among ideas, and upon the appearance of one idea naturally introduce another. 'Tis plain, that in the course of our thinking, and in the constant revolution of our ideas, our imagination runs easily from one idea to another that *resembles* it, and that this quality alone is to the fancy a sufficient bond and association. 'Tis likewise evident, that as the senses, in changing their objects, are necessitated to change them regularly, and take them as they lie *contiguous* to each other, the imagination must by long custom acquire the same method of thinking, and run along the parts of space and time in conceiving its objects. As to the connexion, that is made by the relation of *cause and effect*, we shall have occasion afterwards to examine it to the bottom, and therefore shall not at present insist upon it. 'Tis sufficient to observe, that there is no relation, which produces a stronger connexion in the fancy, and makes one idea more readily recall another, than the relation of cause and effect betwixt their objects. . . .

These are therefore the principles of union or cohesion among our simple ideas, and in the imagination supply the place of that inseparable connexion, by which they are united in our memory. Her is a kind of ATTRACTION, which in the mental world will be found to have as extraordinary effects as in the natural, and to shew itself in as many and as various forms. Its effects are every where conspicuous; but as to its causes, they are mostly unknown, and must be resolv'd into *original* qualities of human nature, which I pretend not to explain. . . .

Amongst the effects of this union or association of ideas, there are none more remarkable, than those complex ideas, which are the common subjects of our thoughts and reasoning, and generally arise from some principle of union among our simple ideas. These complex ideas may be divided into *Relations, Modes, and Sub-*

stances. We shall briefly examine each of these in order, and shall subjoin some considerations concerning our *general* and *particular* ideas, before we leave the present subject, which may be consider'd as the elements of this philosophy.

[Sections V and VI deal with relations, modes, and substances.]

SEC. VII. *Of Abstract Ideas*

A very material question has been started concerning *abstract* or *general* ideas, *whether they be general or particular in the mind's conception of them*. A great philosopher⁶ has disputed the receiv'd opinion in this particular, and has asserted, that all general ideas are nothing but particular ones, annexed to a certain term, which gives them a more extensive signification, and makes them recall upon occasion other individuals, which are similar to them. As I look upon this to be one of the greatest and most valuable discoveries that has been made of late years in the republic of letters, I shall here endeavour to confirm it by some arguments, which I hope will put it beyond all doubt and controversy.

'Tis evident, that in forming most of our general ideas, if not all of them, we abstract from every particular degree of quantity and quality, and that an object ceases not to be of any particular species on account of every small alteration in its extension, duration and other properties. It may therefore be thought, that here is a plain dilemma, that decides concerning the nature of those abstract ideas, which have afforded so much speculation to philosophers. The abstract idea of a man represents men of all sizes and all qualities; which 'tis concluded it cannot do, but either by representing at once all possible sizes and all possible qualities, or by representing no particular one at all. Now it having been esteemed absurd to defend the former proposition, as implying an infinite capacity in the mind, it has been commonly infer'd in favour of the latter; and our abstract ideas have been suppos'd to represent no particular degree either of quantity or quality. But that this inference is erroneous, I shall endeavour to make appear, *first*, by proving, that 'tis utterly impossible to conceive any quantity or quality, without forming a precise notion of its degrees: And *secondly* by showing, that tho' the capacity of the mind be not

⁶ Dr. Berkeley.

infinite, yet we can at once form a notion of all possible degrees of quantity and quality, in such a manner at least, as, however imperfect, may serve all the purposes of reflection and conversation.

To begin with the first proposition, *that the mind cannot form any notion of quantity or quality without forming a precise notion of degrees of each*; we may prove this by the three following arguments. First, We have observ'd, that whatever objects are different are distinguishable, and that whatever objects are distinguishable are separable by the thought and imagination. And we may here add, that these propositions are equally true in the *inverse*, and that whatever objects are separable are also distinguishable, and that whatever objects are distinguishable are also different. For how is it possible we can separate what is not distinguishable, or distinguish what is not different? In order therefore to know, whether abstraction implies a separation, we need only consider it in this view, and examine, whether all the circumstances, which we abstract from in our general ideas, be such as are distinguishable and different from those, which we retain as essential parts of them. But 'tis evident at first sight, that the precise length of a line is not different nor distinguishable from the line itself: nor the precise degree of any quality from the quality. These ideas, therefore, admit no more of separation than they do of distinction and difference. They are consequently conjoined with each other in the conception; and the general idea of a line, notwithstanding all our abstractions and refinements, has in its appearance in the mind a precise degree of quantity and quality; however it may be made to represent others, which have different degrees of both.

Secondly, 'tis confest, that no object can appear to the senses; or in other words, that no impression can become present to the mind, without being determin'd in its degrees both of quantity and quality. The confusion, in which impressions are sometimes involv'd, proceeds only from their faintness and unsteadiness, not from any capacity in the mind to receive any impression, which in its real existence has no particular degree nor proportion. That is a contradiction in terms; and even implies the flattest of all contradictions, *viz.* that 'tis possible for the same thing both to be and not to be.

Now since all ideas are deriv'd from impressions, and are noth-

ing but copies and representations of them, whatever is true of the one must be acknowledg'd concerning the other. Impressions and ideas differ only in their strength and vivacity. The foregoing conclusion is not founded on any particular degree of vivacity. It cannot therefore be affected by any variation in that particular. An idea is a weaker impression; and as a strong impression must necessarily have a determinate quantity and quality, the case must be the same with its copy or representative.

Thirdly, 'tis a principle generally receiv'd in philosophy that everything in nature is individual, and that 'tis utterly absurd to suppose a triangle really existent, which has no precise proportion of sides and angles. If this therefore be absurd in *fact and reality*, it must also be absurd *in idea*; since nothing of which we can form a clear and distinct idea is absurd and impossible. But to form the idea of an object, and to form an idea simply, is the same thing; the reference of the idea to an object being an extraneous denomination, of which in itself it bears no mark or character. Now as 'tis impossible to form an idea of an object, that is possest of quantity and quality, and yet is possest of no precise degree of either; it follows that there is an equal impossibility of forming an idea, that is not limited and confin'd in both these particulars. Abstract ideas are therefore in themselves individual, however they may become general in their representation. The image in the mind is only that of a particular object, tho' the application of it in our reasoning be the same, as if it were universal.

This application of ideas beyond their nature proceeds from our collecting all their possible degrees of quantity and quality in such an imperfect manner as may serve the purposes of life, which is the second proposition I propos'd to explain. When we have found a resemblance⁷ among several objects, that often occur to us, we

⁷ [The following note was added in the Appendix to the third volume of the original edition: "'Tis evident, that even different simple ideas may have a similarity or resemblance to each other; nor is it necessary, that the point or circumstance of resemblance shou'd be distinct or separable from that in which they differ. *Blue* and *green* are different simple ideas, but are more resembling than *blue* and *scarlet*; tho' their perfect simplicity excludes all possibility of separation or distinction. 'Tis the same case with particular sounds, and tastes and smells. These admit of infinite resemblances upon the general appearance and comparison, without having any common circumstance the same. And of this we may be certain, even from the very abstract terms *simple idea*. They comprehend all simple ideas under them. These resemble each other in their simplicity. And yet from their very nature,

apply the same name to all of them, whatever differences we may observe in the degrees of their quantity and quality, and whatever other differences may appear among them. After we have acquired a custom of this kind, the hearing of that name revives the idea of one of these objects, and makes the imagination conceive it with all its particular circumstances and proportions. But as the same word is suppos'd to have been frequently applied to other individuals, that are different in many respects from that idea, which is immediately present to the mind; the word not being able to revive the idea of all these individuals, but only touches the soul, if I may be allow'd so to speak, and revives that custom, which we have acquir'd by surveying them. They are not really and in fact present to the mind, but only in power; nor do we draw them all out distinctly in the imagination, but keep ourselves in a readiness to survey any of them, as we may be prompted by a present design or necessity. The word raises up an individual idea, along with a certain custom; and that custom produces any other individual one, for which we may have occasion. But as the production of all the ideas, to which the name may be apply'd, is in most cases impossible, we abridge that work by a more partial consideration, and find but few inconveniences to arise in our reasoning from that abridgment.

For this is one of the most extraordinary circumstances in the present affair, that after the mind has produc'd an individual idea, upon which we reason, the attendant custom, reviv'd by the general or abstract term, readily suggests any other individual, if by chance we form any reasoning, that agrees not with it. Thus shou'd we mention the word triangle, and form the idea of a particular equilateral one to correspond to it, and shou'd we afterwards assert, *that the three angles of a triangle are equal to each other*, the other individuals of a scalenum and isosceles, which we overlook'd at first, immediately crowd in upon us, and make us perceive the falshood of this proposition, tho' it be true with relation to that idea, which we had form'd. If the mind suggests not always these ideas upon occasion, it proceeds from some imperfection in its fac-

which excludes all composition, this circumstance, in which they resemble, is not distinguishable nor separable from the rest. 'Tis the same case with all the degrees in any quality. They are all resembling, and yet the quality, in any individual, is not distinct from the degree."]

ulties; and such a one as is often the source of false reasoning and sophistry. But this is principally the case with those ideas which are abstruse and compounded. On other occasions the custom is more entire, and 'tis seldom we run into such errors.

Nay so entire is the custom, that the very same idea may be annex to several different words, and may be employ'd in different reasonings, without any danger of mistake. Thus the idea of an equilateral triangle of an inch perpendicular may serve us in talking of a figure, of a rectilineal figure, of a regular figure, of a triangle, and of an equilateral triangle. All these terms, therefore, are in this case attended with the same idea; but as they are wont to be apply'd in a greater or lesser compass, they excite their particular habits, and thereby keep the mind in a readiness to observe, that no conclusion be form'd contrary to any ideas, which are usually compriz'd under them.

Before those habits have become entirely perfect, perhaps the mind may not be content with forming the idea of only one individual, but may run over several, in order to make itself comprehend its own meaning, and the compass of that collection, which it intends to express by the general term. That we may fix the meaning of the word, figure, we may revolve in our mind the ideas of circles, squares, parallelograms, triangles of different sizes and proportions, and may not rest on one image or idea. However this may be, 'tis certain *that* we form the idea of individuals, whenever we use any general term; *that* we seldom or never can exhaust these individuals; and *that* those, which remain, are only represented by means of that habit, by which we recal them, whenever any present occasion requires it. This then is the nature of our abstract ideas and general terms; and 'tis after this manner we account for the foregoing paradox, *that some ideas are particular in their nature, but general in their representation*.⁸ A particular idea becomes general by being annex'd to a general term; that is, to a term, which from a customary conjunction has a relation to many other particular ideas, and readily recals them in the imagination.

The only difficulty, that can remain on this subject, must be with regard to that custom, which so readily recals every particular idea, for which we may have occasion, and is excited by any word

⁸ Locke, 'Essay on Human Understanding,' Book III. chap. iii. sec. 11.

or sound, to which we commonly annex it. The most proper method, in my opinion, of giving a satisfactory explication of this act of the mind, is by producing other instances, which are analogous to it, and other principles, which facilitate its operation. To explain the ultimate causes of our mental actions is impossible. 'Tis sufficient, if we can give any satisfactory account of them from experience and analogy.

First then I observe, that when we mention any great number, such as a thousand, the mind has generally no adequate idea of it, but only a power of producing such an idea, by its adequate idea of the decimals, under which the number is comprehended. This imperfection, however, in our ideas, is never felt in our reasonings; which seems to be an instance parallel to the present one of universal ideas.

Secondly, we have several instances of habits, which may be reviv'd by one single word; as when a person, who has by rote any periods of a discourse, or any number of verses, will be put in remembrance of the whole, which he is at a loss to recollect, by that single word or expression, with which they begin.

Thirdly, I believe every one, who examines the situation of his mind in reasoning, will agree with me, that we do not annex distinct and compleat ideas to every term we make use of, and that in talking of *government, church, negotiation, conquest*, we seldom spread out in our minds all the simple ideas, of which these complex ones are compos'd. 'Tis however observable, that notwithstanding this imperfection we may avoid talking nonsense on these subjects, and may perceive any repugnance among the ideas, as well as if we had a full comprehension of them. Thus if instead of saying, *that in war the weaker have always recourse to negotiation*, we shou'd say, *that they have always recourse to conquest*, the custom, which we have acquir'd of attributing certain relations to ideas, still follows the words, and makes us immediately perceive the absurdity of that proposition; in the same manner as one particular idea may serve us in reasoning concerning other ideas, however different from it in several circumstances.

Fourthly, As the individuals are collected together, and plac'd under a general term with a view to that resemblance, which they bear to each other, this relation must facilitate their entrance in the imagination, and make them be suggested more readily upon

occasion. And indeed if we consider the common progress of the thought, either in reflection or conversation, we shall find great reason to be satisfy'd in this particular. Nothing is more admirable, than the readiness, with which the imagination suggests its ideas, and presents them at the very instant, in which they become necessary or useful. The fancy runs from one end of the universe to the other in collecting those ideas, which belong to any subject. One would think the whole intellectual world of ideas was at once subjected to our view, and that we did nothing but pick out such as were most proper for our purpose. There may not, however, be any present, beside those very ideas, that are thus collected by a kind of magical faculty in the soul, which, tho' it be always most perfect in the greatest geniuses, and is properly what we call a genius, is however inexplicable by the utmost efforts of human understanding.

Perhaps these four reflections may help to remove all difficulties to the hypothesis I have propos'd concerning abstract ideas, so contrary to that, which has hitherto prevail'd in philosophy. But, to tell the truth I place my chief confidence in what I have already prov'd concerning the impossibility of general ideas, according to the common method of explaining them. We must certainly seek some new system on this head, and there plainly is none beside what I have propos'd. If ideas be particular in their nature, and at the same time finite in their number, 'tis only by custom they can become general in their representation, and contain an infinite number of other ideas under them.

Before I leave this subject I shall employ the same principles to explain that *distinction of reason*, which is so much talk'd of, and is so little understood, in the schools. Of this kind is the distinction betwixt figure and the body figur'd; motion and the body mov'd. The difficulty of explaining this distinction arises from the principle above explain'd, *that all ideas, which are different, are separable*. For it follows from thence, that if the figure be different from the body, their ideas must be separable as well as distinguishable; if they be not different, their ideas can neither be separable nor distinguishable. What then is meant by a distinction of reason, since it implies neither a difference nor separation.

To remove this difficulty we must have recourse to the foregoing explication of abstract ideas. 'Tis certain that the mind wou'd

never have dream'd of distinguishing a figure from the body figur'd, as being in reality neither distinguishable, nor different, nor separable; did it not observe, that even in this simplicity there might be contain'd many different resemblances and relations. Thus when a globe of white marble is presented, we receive only the impression of a white colour dispos'd in a certain form, nor are we able to separate and distinguish the colour from the form. But observing afterwards a globe of black marble and a cube of white, and comparing them with our former object, we find two separate resemblances, in what formerly seem'd, and really is, perfectly inseparable. After a little more practice of this kind, we begin to distinguish the figure from the colour by a *distinction of reason*; that is, we consider the figure and colour together, since they are in effect the same and undistinguishable; but still view them in different aspects, according to the resemblances, of which they are susceptible. When we wou'd consider only the figure of the globe of white marble, we form in reality an idea both of the figure and colour, but tacitly carry our eye to its resemblance with the globe of black marble: And in the same manner, when we wou'd consider its colour only, we turn our view to its resemblance with the cube of white marble. By this means we accompany our ideas with a kind of reflection, of which custom renders us, in a great measure, insensible. A person, who desires us to consider the figure of a globe of white marble without thinking on its colour, desires an impossibility; but his meaning is, that we shou'd consider the figure and colour together, but still keep in our eye the resemblance to the globe of black marble, or that to any other globe of whatever colour or substance. . . .

[Part II deals with the ideas of space and time.]

PART III. OF KNOWLEDGE AND PROBABILITY

SEC. I. *Of Knowledge*

There are seven different kinds of philosophical relation, *viz. resemblance, identity, relations of time and place, proportion in quantity or number, degrees in any quality, contrariety, and causation.*⁹

⁹ [See Part I, Sec. V, *Of Relations*:]

"The word RELATION is commonly used in two senses considerably different from each other. Either for that quality, by which two ideas are connected together

These relations may be divided into two classes; into such as depend entirely on the ideas, which we compare together, and such as may be chang'd without any change in the ideas. 'Tis from the idea of a triangle, that we discover the relation of equality, which its three angles bear to two right ones; and this relation is invariable, as long as our idea remains the same. On the contrary, the relations of *contiguity* and *distance* betwixt two objects may be chang'd merely by an alteration of their place, without any change on the objects themselves or on their ideas; and the place depends on a hundred different accidents, which cannot be foreseen by the mind. 'Tis the same case with *identity* and *causation*. Two objects, tho' perfectly resembling each other, and even appearing in the same place at different times, may be numerically different: And as the power, by which one object produces another, is never discoverable merely from their idea, 'tis evident *cause* and *effect* are relations, of which we receive information from experience, and not from any abstract reasoning or reflection. There is no single phaenomenon, even the most simple, which can be accounted for from the qualities of the

in the imagination, and the one naturally introduces the other, after the manner above-explained; or for that particular circumstance, in which, even upon the arbitrary union of two ideas in the fancy, we may think proper to compare them. In common language the former is always the sense, in which we use the word, relation; and 'tis only in philosophy, that we extend it to mean any particular subject of comparison, without a connecting principle. Thus distance will be allowed by philosophers to be a true relation, because we acquire an idea of it by the comparing of objects: But in a common way we say, *that nothing can be more distant than such or such things from each other, nothing can have less relation*; as if distance and relation were incompatible.

"It may perhaps be esteemed an endless task to enumerate all those qualities, which make objects admit of comparison, and by which the ideas of *philosophical* relation are produced. But if we diligently consider them, we shall find that without difficulty they may be compriz'd under seven general heads, which may be considered as the sources of all *philosophical* relation.

"1. The first is *resemblance*: And this is a relation, without which no philosophical relation can exist; since no objects will admit of comparison, but what have some degree of resemblance. But tho' resemblance be necessary to all philosophical relation, it does not follow, that it always produces a connexion or association of ideas. When a quality becomes very general, and is common to a great many individuals, it leads not the mind directly to any one of them; but by presenting at once too great choice, does thereby prevent the imagination from fixing on any single object.

"2. *Identity* may be esteem'd a second species of relation. This relation I here

objects, as they appear to us; or which we cou'd foresee without the help of our memory and experience.

It appears, therefore, that of these seven philosophical relations, there remain only four, which depending solely upon ideas, can be the objects of knowledge and certainty. These four are *resemblance*, *contrariety*, *degrees in quality*, and *proportions in quantity or number*. Three of these relations are discoverable at first sight, and fall more properly under the province of intuition than demonstration. When any objects *resemble* each other, the resemblance will at first strike the eye, or rather the mind; and seldom requires a second examination. The case is the same with *contrariety*, and with the *degrees* of any *quality*. No one can once doubt but existence and non-existence destroy each other, and are perfectly incompatible and contrary. And tho' it be impossible to judge exactly of the degrees of any quality, such as colour, taste, heat, cold, when the difference betwixt them is very small; yet 'tis easy to decide, that any of them is superior or inferior to another, when there difference is consider-

consider as apply'd in its strictest sense to constant and unchangeable objects; without examining the nature and foundation of personal identity, which shall find its place afterwards. Of all relations the most universal is that of identity, being common to every being whose existence has any duration.

"3. After identity the most universal and comprehensive relations are those of *Space* and *Time*, which are the sources of an infinite number of comparisons, such as *distant*, *contiguous*, *above*, *below*, *before*, *after*, &c.

"4. All those objects, which admit of *quantity*, or *number*, may be compar'd in that particular; which is another very fertile source of relation.

"5. When any two objects possess the same *quality* in common, the *degrees*, in which they possess it, form a fifth species of relation. Thus of two objects, which are both heavy, the one may be either of greater, or less weight than the other. Two colours, that are of the same kind, may yet be of different shades, and in that respect admit of comparison.

"6. The relation of *contrariety* may at first sight be regarded as an exception to the rule, *that no relation of any kind can subsist without some degree of resemblance*. But let us consider, that no two ideas are in themselves contrary, except those of existence and non-existence, which are plainly resembling, as implying both of them an idea of the object; tho' the latter excludes the object from all times and places, in which it is supposed not to exist.

"7. All other objects, such as fire and water, heat and cold, are only found to be contrary from experience, and from the contrariety of their *causes* or *effects*; which relation of cause and effect is a seventh philosophical relation, as well as a natural one. The resemblance implied in this relation, shall be explain'd afterwards.

"It might naturally be expected, that I should join *difference* to the other relations. But that I consider rather as a negation of relation, than as anything real or positive. Difference is of two kinds as oppos'd either to identity or resemblance. The first is call'd a difference of *number*; the other of *kind*."]

able. And this decision we always pronounce at first sight, without any enquiry or reasoning.

We might proceed, after the same manner, in fixing the *proportions* of *quantity* or *number*, and might at one view observe a superiority or inferiority betwixt any numbers, or figures; especially where the difference is very great and remarkable. As to equality or any exact proportion, we can only guess at it from a single consideration; except in very short numbers, or very limited portions of extension; which are comprehended in an instant, and where we perceive an impossibility of falling into any considerable error. In all other cases we must settle the proportions with some liberty, or proceed in a more *artificial* manner.

I have already observ'd, that geometry, or the *art*, by which we fix the proportions of figures; tho' it much excels both in universality and exactness, the loose judgments of the senses and imagination; yet never attains a perfect precision and exactness. It's first principles are still drawn from the general appearance of the objects; and that appearance can never afford us any security, when we examine the prodigious minuteness of which nature is susceptible. Our ideas seem to give a perfect assurance, that no two right lines can have a common segment; but if we consider these ideas, we shall find, that they always suppose a sensible inclination of the two lines, and that where the angle they form is extremely small, we have no standard of a right line so precise as to assure us of the truth of this proposition. 'Tis the same case with most of the primary decisions of the mathematics.

There remain, therefore, algebra and arithmetic as the only sciences, in which we can carry on a chain of reasoning to any degree of intricacy, and yet preserve a perfect exactness and certainty. We are possess'd of a precise standard, by which we can judge of the equality and proportion of numbers; and according as they correspond or not to that standard, we determine their relations, without any possibility of error. When two numbers are so combin'd, as that the one has always an unite answering to every unite of the other, we pronounce them equal; and 'tis for want of such a standard of equality in extension, that geometry can scarce be esteem'd a perfect and infallible science.

But here it may not be amiss to obviate a difficulty, which may arise from my asserting, that tho' geometry falls short of that per-

fect precision and certainty, which are peculiar to arithmetic and algebra, yet it excels the imperfect judgments of our senses and imagination. The reason why I impute any defect to geometry, is, because its original and fundamental principles are deriv'd merely from appearances; and it may perhaps be imagin'd, that this defect must always attend it, and keep it from ever reaching a greater exactness in the comparison of objects or ideas, then what our eye or imagination alone is able to attain. I own that this defect so far attends it, as to keep it from ever aspiring to a full certainty: But since these fundamental principles depend on the easiest and least deceitful appearances, they bestow on their consequences a degree of exactness, of which these consequences are singly incapable. 'Tis impossible for the eye to determine the angles of a chiliagon to be equal to 1996 right angles, or make any conjecture, that approaches this proportion; but when it determines, that right lines cannot concur; that we cannot draw more than one right line between two given points; it's mistakes can never be of any consequence. And this is the nature and use of geometry, to run us up to such appearances, as, by reason of their simplicity, cannot lead us into any considerable error.

I shall here take occasion to propose a second observation concerning our demonstrative reasonings, which is suggested by the same subject of the mathematics. 'Tis usual with mathematicians, to pretend, that those ideas, which are their objects, are of so refin'd and spiritual a nature, that they fall not under the conception of the fancy, but must be comprehended by a pure and intellectual view, of which the superior faculties of the soul are alone capable. The same notion runs thro' most parts of philosophy, and is principally made use of to explain our abstract ideas, and to shew how we can form an idea of a triangle, for instance, which shall neither be an isosceles nor scalenum, nor be confin'd to any particular length and proportion of sides. 'Tis easy to see, why philosophers are so fond of this notion of some spiritual and refin'd perceptions; since by that means they cover many of their absurdities, and may refuse to submit to the decisions of clear ideas, by appealing to such as are obscure and uncertain. But to destroy this artifice, we need but reflect on that principle so oft insisted on, *that all our ideas are copy'd from our impressions*. For from thence we may immediately conclude, that since all impressions are clear

and precise, the ideas, which are copy'd from them, must be of the same nature, and can never, but from our fault, contain any thing so dark and intricate. An idea is by its very nature weaker and fainter than an impression; but being in every other respect the same, cannot imply any very great mystery. If its weakness render it obscure, 'tis our business to remedy that defect, as much as possible, by keeping the idea steady and precise; and till we have done so, 'tis in vain to pretend to reasoning and philosophy.

SEC. II. *Of Probability; and of the Idea of Cause and Effect*

This is all I think necessary to observe concerning those four relations, which are the foundation of science; but as to the other three, which depend not upon the idea, and may be absent or present even while *that* remains the same, 'twill be proper to explain them more particularly. These three relations are *identity, the situations in time and place, and causation*.

All kinds of reasoning consist in nothing but a *comparison*, and a discovery of those relations, either constant or inconstant, which two or more objects bear to each other. This comparison we may make, either when both the objects are present to the senses, or when neither of them is present, or when only one. When both the objects are present to the senses along with the relation, we call this perception rather than reasoning; nor is there in this case any exercise of the thought, or any action, properly speaking, but a mere passive admission of the impressions thro' the organs of sensation. According to this way of thinking, we ought not to receive as reasoning any of the observations we may make concerning *identity*, and the relations of *time* and *place*; since in none of them the mind can go beyond what is immediately present to the senses, either to discover the real existence or the relations of objects. 'Tis only *causation*, which produces such a connexion, as to give us assurance from the existence or action of one object, that 'twas follow'd or preceded by any other existence or action; nor can the other two relations be ever made use of in reasoning, except so far as they either affect or are affected by it. There is nothing in any objects to persuade us, that they are either always *remote* or always *contiguous*; and when from experience and observation we discover, that their relation in this particular is invariable, we always con-

clude there is some secret *cause*, which separates or unites them. The same reasoning extends to *identity*. We readily suppose an object may continue individually the same, tho' several times absent from and present to the senses; and ascribe to it an identity, notwithstanding the interruption of the perception, whenever we conclude, that if we had kept our eye or hand constantly upon it, it wou'd have convey'd an invariable and uninterrupted perception. But this conclusion beyond the impressions of our senses can be founded only on the connexion of *cause and effect*; nor can we otherwise have any security, that the object is not chang'd upon us, however much the new object may resemble that which was formerly present to the senses. Whenever we discover such a perfect resemblance, we consider, whether it be common in that species of objects; whether possibly or probably any cause cou'd operate in producing the change and resemblance; and according as we determine concerning these causes and effects, we form our judgment concerning the identity of the object.

Here then it appears, that of those three relations, which depend not upon the mere ideas, the only one, that can be trac'd beyond our senses, and informs us of existences and objects, which we do not see or feel, is *causation*. This relation, therefore, we shall endeavour to explain fully before we leave the subject of the understanding.

To begin regularly, we must consider the idea of *causation*, and see from what origin it is deriv'd. 'Tis impossible to reason justly, without understanding perfectly the idea concerning which we reason; and 'tis impossible perfectly to understand any idea, without tracing it up to its origin, and examining that primary impression, from which it arises. The examination of the impression bestows a clearness on the idea; and the examination of the idea bestows a like clearness on all our reasoning.

Let us therefore cast our eye on any two objects, which we call cause and effect, and turn them on all sides, in order to find that impression, which produces an idea of such prodigious consequence. At first sight I perceive, that I must not search for it in any of the particular *qualities* of the objects; since, which-ever of these qualities I pitch on, I find some object, that is not possest of it, and yet falls under the denomination of cause or effect. And indeed there is nothing existent, either externally or internally, which is not to be

consider'd either as a cause or an effect; tho' 'tis plain there is no one quality, which universally belongs to all beings, and gives them a title to that denomination.

The idea, then, of causation must be deriv'd from some *relation* among objects; and that relation we must now endeavour to discover. I find in the first place, that whatever objects are consider'd as causes or effects, are *contiguous*; and that nothing can operate in a time or place, which is ever so little remov'd from those of its existence. Tho' distant objects may sometimes seem productive of each other, they are commonly found upon examination to be link'd by a chain of causes, which are contiguous among themselves and to the distant objects; and when in any particular instance we cannot discover this connexion, we still presume it to exist. We may therefore consider the relation of *contiguity* as essential to that of causation; at least may suppose it such, according to the general opinion, till we can find a more proper occasion to clear up this matter, by examining what objects are or are not susceptible of juxtaposition and conjunction.

The second relation I shall observe as essential to causes and effects, is not so universally acknowledg'd, but is liable to some controversy. 'Tis that of *PRIORITY* of time in the cause before the effect. Some pretend that 'tis not absolutely necessary a cause shou'd precede its effect; but that any object or action, in the very first moment of its existence, may exert its productive quality, and give rise to another object or action, perfectly co-temporary with itself. But beside that experience in most instances seems to contradict this opinion, we may establish the relation of priority by a kind of inference or reasoning. 'Tis an establish'd maxim both in natural and moral philosophy, that an object, which exists for any time in its full perfection without producing another, is not its sole cause; but is assisted by some other principle, which pushes it from its state of inactivity, and makes it exert that energy, of which it was secretly possest. Now if any cause may be perfectly co-temporary with its effect, 'tis certain, according to this maxim, that they must all of them be so; since any one of them, which regards its operation for a single moment, exerts not itself at that very individual time, in which it might have operated; and therefore is no proper cause. The consequence of this wou'd be no less than the destruction of that succession of causes, which we observe in the

world; and indeed, the utter annihilation of time. For if one cause were co-temporary with its effect, and this effect with *its* effect, and so on, 'tis plain there wou'd be no such thing as succession, and all objects must be co-existent.

If this argument appear satisfactory, 'tis well. If not, I beg the reader to allow me the same liberty, which I have us'd in the preceding case, of supposing it such. For he shall find, that the affair is of no great importance.

Having thus discover'd or suppos'd the two relations of *contiguity* and *succession* to be essential to causes and effects, I find I am stopt short, and can proceed no farther in considering any single instance of cause and effect. Motion in one body is regarded upon impulse as the cause of motion in another. When we consider these objects with the utmost attention, we find only that the one body approaches the other; and that the motion of it precedes that of the other, but without any sensible interval. 'Tis in vain to rack ourselves with *farther* thought and reflection upon this subject. We can go no *farther* in considering this particular instance.

Shou'd any one leave this instance, and pretend to define a cause, by saying it is something productive of another, 'tis evident he wou'd say nothing. For what does he mean by *production*? Can he give any definition of it, that will not be the same with that of causation? If he can; I desire it may be produc'd. If he cannot; he here runs in a circle, and gives a synonymous term instead of a definition.

Shall we then rest contented with these two relations of contiguity and succession, as affording a complete idea of causation? By no means. An object may be contiguous and prior to another, without being consider'd as its cause. There is a NECESSARY CONNEXION to be taken into consideration; and that relation is of much greater importance, than any of the other two above-mention'd.

Here again I turn the object on all sides, in order to discover the nature of this necessary connexion, and find the impression, or impressions, from which its idea may be deriv'd. When I cast my eye on the *known qualities* of objects, I immediately discover that the relation of cause and effect depends not in the least on *them*. When I consider their *relations*, I can find none but those of contiguity and succession; which I have already regarded as imperfect and unsatisfactory. Shall the despair of success make me assert, that I am here

possest of an idea, which is not preceded by any similar impression? This wou'd be too strong a proof of levity and inconstancy; since the contrary principle has been already so firmly establish'd, as to admit of no farther doubt; at least, till we have more fully examin'd the present difficulty.

We must, therefore, proceed like those, who being in search of any thing, that lies conceal'd from them, and not finding it in the place they expected, beat about all the neighbouring fields, without any certain view or design, in hopes their good fortune will at last guide them to what they search for. 'Tis necessary for us to leave the direct survey of this question concerning the nature of that *necessary connexion*, which enters into our idea of cause and effect; and endeavour to find some other questions, the examination of which will perhaps afford a hint, that may serve to clear up the present difficulty. Of these questions there occur two, which I shall proceed to examine, *viz.*

First, For what reason we pronounce it *necessary*, that every thing whose existence has a beginning, shou'd also have a cause?

Secondly, Why we conclude, that such particular causes must *necessarily* have such particular effects; and what is the nature of that *inference* we draw from the one to the other, and of the *belief* we repose in it?

I shall only observe before I proceed any farther, that tho' the ideas of cause and effect be deriv'd from the impressions of reflection as well as from those of sensation, yet for brevity's sake, I commonly mention only the latter as the origin of these ideas; tho' I desire that whatever I say of them may also extend to the former. Passions are connected with their objects and with one another; no less than external bodies are connected together. The same relation, then, of cause and effect, which belongs to one, must be common to all of them.

SEC. III. *Why a Cause Is Always Necessary*

To begin with the first question concerning the necessity of a cause: 'Tis a general maxim in philosophy, that *whatever begins to exist, must have a cause of existence*. This is commonly taken for granted in all reasonings, without any proof given or demanded. 'Tis suppos'd to be founded on intuition, and to be one of those maxims, which tho' they may be deny'd with the lips, 'tis impos-

sible for men in their hearts really to doubt of. But if we examine this maxim by the idea of knowledge above-explain'd, we shall discover in it no mark of any such intuitive certainty; but on the contrary shall find, that 'tis of a nature quite foreign to that species of conviction.

All certainty arises from the comparison of ideas, and from the discovery of such relations as are unalterable, so long as the ideas continue the same. These relations are *resemblance, proportions in quantity and number, degrees of any quality, and contrariety*; none of which are imply'd in this proposition, *Whatever has a beginning has also a cause of existence*. That proposition therefore is not intuitively certain. At least any one, who wou'd assert it to be intuitively certain, must deny these to be the only infallible relations, and must find some other relation of that kind to be imply'd in it; which it will then be time enough to examine.

But here is an argument, which proves at once, that the foregoing proposition is neither intuitively nor demonstrably certain. We can never demonstrate the necessity of a cause to every new existence, or new modification of existence, without shewing at the same time the impossibility there is, that any thing can ever begin to exist without some productive principle; and where the latter proposition cannot be prov'd, we must despair of ever being able to prove the former. Now that the latter proposition is utterly incapable of a demonstrative proof, we may satisfy ourselves by considering, that as all distinct ideas are separable from each other, and as the ideas of cause and effect are evidently distinct, 'twill be easy for us to conceive any object to be non-existent this moment, and existent the next, without conjoining to it the distinct idea of a cause or productive principle. The separation, therefore, of the idea of a cause from that of a beginning of existence, is plainly possible for the imagination; and consequently the actual separation of these objects is so far possible, that it implies no contradiction nor absurdity; and is therefore incapable of being refuted by any reasoning from mere ideas; without which 'tis impossible to demonstrate the necessity of a cause.

Accordingly we shall find upon examination, that every demonstration, which has been produc'd for the necessity of a cause, is fallacious and sophistical. All the points of time and place,¹⁰ say

¹⁰ Mr. *Hobbes*.

some philosophers, in which we can suppose any object to begin to exist, are in themselves equal; and unless there be some cause, which is peculiar to one time and to one place, and which by that means determines and fixes the existence, it must remain in eternal suspense; and the object can never begin to be, for want of something to fix its beginning. But I ask; Is there any more difficulty in supposing the time and place to be fix'd without a cause, than to suppose the existence to be determin'd in that manner? The first question that occurs on this subject is always, *whether* the object shall exist or not: The next, *when* and *where* it shall begin to exist. If the removal of a cause be intuitively absurd in the one case, it must be so in the other: And if that absurdity be not clear without a proof in the one case, it will equally require one in the other. The absurdity, then, of the one supposition can never be a proof of that of the other; since they are both upon the same footing, and must stand or fall by the same reasoning.

The second argument,¹¹ which I find us'd on this head, labours under an equal difficulty. Every thing, 'tis said, must have a cause; for if any thing wanted a cause, *it* wou'd produce *itself*; that is, exist before it existed; which is impossible. But this reasoning is plainly unconclusive; because it supposes, that in our denial of a cause we still grant what we expressly deny, *viz.* that there must be a cause; which therefore is taken to be the object itself; and *that*, no doubt is an evident contradiction. But to say that any thing is produc'd, or to express myself more properly, comes into existence, without a cause, is not to affirm, that 'tis itself its own cause; but on the contrary in excluding all external causes, excludes *a fortiori* the thing itself, which is created. An object, that exists absolutely without any cause, certainly is not its own cause; and when you assert, that the one follows from the other, you suppose the very point in question, and take it for granted, that 'tis utterly impossible any thing can ever begin to exist without a cause, but that upon the exclusion of one productive principle, we must still have recourse to another.

'Tis exactly the same case with the third argument,¹² which has been employ'd to demonstrate the necessity of a cause. Whatever is produc'd without any cause, is produc'd by *nothing*; or in other words, has nothing for its cause. But nothing can never be a cause,

¹¹ Dr. Clarke and others.

¹² Mr. Locke.

no more than it can be something, or equal to two right angles. By the same intuition, that we perceive nothing not to be equal to two right angles, or not to be something, we perceive, that it can never be a cause; and consequently must perceive, that every object has a real cause of its existence.

I believe it will not be necessary to employ many words in showing the weakness of this argument, after what I have said of the foregoing. They are all of them founded on the same fallacy, and are deriv'd from the same turn of thought. 'Tis sufficient only to observe, that when we exclude all causes we really do exclude them, and neither suppose nothing nor the object itself to be the causes of the existence; and consequently can draw no argument from the absurdity of these suppositions to prove the absurdity of that exclusion. If every thing must have a cause, it follows, that upon the exclusion of other causes we must accept of the object itself or of nothing as causes. But 'tis the very point in question, whether every thing must have a cause or not; and therefore, according to all just reasoning, it ought never to be taken for granted.

They are still more frivolous, who say, that every effect must have a cause, because 'tis imply'd in the very idea of effect. Every effect necessarily pre-supposes a cause; effect being a relative term, of which cause is the correlative. But this does not prove, that every being must be preceded by a cause; no more than it follows, because every husband must have a wife, that therefore every man must be marry'd. The true state of the question is, whether every object, which begins to exist, must owe its existence to a cause; and this I assert neither to be intuitively nor demonstratively certain, and hope to have prov'd it sufficiently by the foregoing arguments.

Since it is not from knowledge or any scientific reasoning, that we derive the opinion of the necessity of a cause to every new production, that opinion must necessarily arise from observation and experience. The next question, then, shou'd naturally be, *how experience gives rise to such a principle?* But as I find it will be more convenient to sink this question in the following, *Why we conclude, that such particular causes must necessarily have such particular effects, and why we form an inference from one to another?* we shall make that the subject of our future enquiry. 'Twill, perhaps, be found in the end, that the same answer will serve for both questions.

SEC. IV. *Of the Component Parts of Our Reasonings
concerning Cause and Effect*

Tho' the mind in its reasonings from causes or effects carries its view beyond those objects, which it sees or remembers, it must never lose sight of them entirely, nor reason merely upon its own ideas, without some mixture of impressions, or at least of ideas of the memory, which are equivalent to impressions. When we infer effects from causes, we must establish the existence of these causes; which we have only two ways of doing, either by an immediate perception of our memory or senses, or by an inference from other causes; which causes again we must ascertain in the same manner, either by a present impression, or by an inference from *their* causes, and so on, till we arrive at some object, which we see or remember. 'Tis impossible for us to carry on our inferences *in infinitum*; and the only thing, that can stop them, is an impression of the memory or senses, beyond which there is no room for doubt or enquiry.

To give an instance of this, we may chuse any point of history, and consider for what reason we either believe or reject it. Thus we believe that CAESAR was kill'd in the senate-house on the *ides of March*; and that because this fact is establish'd on the unanimous testimony of historians, who agree to assign this precise time and place to that event. Here are certain characters and letters present either to our memory or senses; which characters we likewise remember to have been us'd as the signs of certain ideas; and these ideas were either in the minds of such as were immediately present at that action, and receiv'd the ideas directly from its existence; or they were deriv'd from the testimony of others, and that again from another testimony, by a visible gradation, 'till we arrive at those who were eye-witnesses and spectators of the event. 'Tis obvious all this chain of argument or connexion of causes and effects, is at first founded on those characters or letters, which are seen or remember'd, and that without the authority either of the memory or senses our whole reasoning wou'd be chimerical and without foundation. Every link of the chain wou'd in that case hang upon another; but there wou'd not be any thing fix'd to one end of it, capable of sustaining the whole; and consequently there wou'd be no belief nor evidence. And this actually is the case with all *hypothetical* arguments, or reasonings upon a supposition; there being

in them, neither any present impression, nor belief of a real existence.

I need not observe, that 'tis no just objection to the present doctrine, that we can reason upon our past conclusions or principles, without having recourse to those impressions, from which they first arose. For even supposing these impressions shou'd be entirely ef-fac'd from the memory, the conviction they produc'd may still remain; and 'tis equally true, that all reasonings concerning causes and effects are originally deriv'd from some impression; in the same manner, as the assurance of a demonstration proceeds always from a comparison of ideas, tho' it may continue after the comparison is forgot.

SEC. V. *Of the Impressions of the Senses and Memory*

In this kind of reasoning, then, from causation, we employ materials, which are of a mix'd and heterogeneous nature, and which, however connected, are yet essentially different from each other. All our arguments concerning causes and effects consist both of an impression of the memory or senses, and of the idea of that existence, which produces the object of the impression or is produc'd by it. Here therefore we have three things to explain, *viz.* *First*, The original impression. *Secondly*, The transition to the idea of the connected cause or effect. *Thirdly*, The nature and qualities of that idea.

As to those *impressions*, which arise from the *senses*, their ultimate cause is, in my opinion, perfectly inexplicable by human reason, and 'twill always be impossible to decide with certainty, whether they arise immediately from the object, or are produc'd by the creative power of the mind, or are deriv'd from the author of our being. Nor is such a question any way material to our present purpose. We may draw inferences from the coherence of our perceptions, whether they be true or false; whether they represent nature justly, or be mere illusions of the senses.

When we search for the characteristic, which distinguishes the *memory* from the imagination, we must immediately perceive, that it cannot lie in the simple ideas it presents to us; since both these faculties borrow their simple ideas from the impressions, and can never go beyond these original perceptions. These faculties are as little distinguish'd from each other by the arrangement of their

complex ideas. For tho' it be a peculiar property of the memory to preserve the original order and position of its ideas, while the imagination transposes and changes them, as it pleases; yet this difference is not sufficient to distinguish them in their operation, or make us know the one from the other; it being impossible to recal the past impressions, in order to compare them with our present ideas, and see whether their arrangement be exactly similar. Since therefore the memory is known, neither by the order of its *complex* ideas, nor the nature of its *simple* ones; it follows, that the difference betwixt it and the imagination lies in its superior force and vivacity. A man may indulge his fancy in feigning any past scene of adventures; nor wou'd there be any possibility of distinguishing this from a remembrance of a like kind, were not the ideas of the imagination fainter and more obscure.

It frequently happens, that when two men have been engag'd in any scene of action, the one shall remember it much better than the other, and shall have all the difficulty in the world to make his companion recollect it. He runs over several circumstances in vain; mentions the time, the place, the company, what was said, what was done on all sides; till at last he hits on some lucky circumstance, that revives the whole, and gives his friend a perfect memory of every thing. Here the person that forgets receives at first all the ideas from the discourse of the other, with the same circumstances of time and place; tho' he considers them as mere fictions of the imagination. But as soon as the circumstance is mention'd, that touches the memory, the very same ideas now appear in a new light, and have, in a manner, a different feeling from what they had before. Without any other alteration, beside that of the feeling, they become immediately ideas of the memory, and are assented to.

Since, therefore, the imagination can represent all the same objects that the memory can offer to us, and since those faculties are only distinguish'd by the different *feeling* of the ideas they present, it may be proper to consider what is the nature of that feeling. And here I believe every one will readily agree with me, that the ideas of the memory are more *strong* and *lively* than those of the fancy.

A painter, who intended to represent a passion or emotion of any kind, wou'd endeavour to get a sight of a person actuated by a like emotion, in order to enliven his ideas, and give them a force

and vivacity superior to what is found in those, which are mere fictions of the imagination. The more recent this memory is, the clearer is the idea; and when after a long interval he wou'd return to the contemplation of his object, he always finds its idea to be much decay'd, if not wholly obliterated. We are frequently in doubt concerning the ideas of the memory, as they become very weak and feeble; and are at a loss to determine whether any image proceeds from the fancy or the memory, when it is not drawn in such lively colours as distinguish that latter faculty. I think, I remember such an event, says one; but am not sure. A long tract of time has almost worn it out of my memory, and leaves me uncertain whether or not it be the pure offspring of my fancy.

And as an idea of the memory, by losing its force and vivacity, may degenerate to such a degree, as to be taken for an idea of the imagination; so on the other hand an idea of the imagination may acquire such a force and vivacity, as to pass for an idea of the memory, and counterfeit its effects on the belief and judgment. This is noted in the case of liars; who by the frequent repetition of their lies, come at last to believe and remember them, as realities; custom and habit having in this case, as in many others, the same influence on the mind as nature, and infixing the idea with equal force and vigour.

Thus it appears, that the *belief* or *assent*, which always attends the memory and senses, is nothing but the vivacity of those perceptions they present; and that this alone distinguishes them from the imagination. To believe is in this case to feel an immediate impression of the senses, or a repetition of that impression in the memory. 'Tis merely the force and liveliness of the perception, which constitutes the first act of the judgment, and lays the foundation of that reasoning, which we build upon it, when we trace the relation of cause and effect.

SEC. VI. *Of the Inference from the Impression to the Idea*

'Tis easy to observe, that in tracing this relation, the inference we draw from cause to effect, is not deriv'd merely from a survey of these particular objects, and from such a penetration into their essences as may discover the dependance of the one upon the other. There is no object, which implies the existence of any other if we consider these objects in themselves, and never look beyond the

ideas which we form of them. Such an inference wou'd amount to knowledge, and wou'd imply the absolute contradiction and impossibility of conceiving any thing different. But as all distinct ideas are separable, 'tis evident there can be no impossibility of that kind. When we pass from a present impression to the idea of any object, we might possibly have separated the idea from the impression, and have substituted any other idea in its room.

'Tis therefore by EXPERIENCE only, that we can infer the existence of one object from that of another. The nature of experience is this. We remember to have had frequent instances of the existence of one species of objects; and also remember, that the individuals of another species of objects have always attended them, and have existed in a regular order of contiguity and succession with regard to them. Thus we remember, to have seen that species of object we call *flame*, and to have felt that species of sensation we call *heat*. We likewise call to mind their constant conjunction in all past instances. Without any farther ceremony, we call the one *cause* and the other *effect*, and infer the existence of the one from that of the other. In all those instances from which we learn the conjunction of particular causes and effects, both the causes and effects have been perceiv'd by the senses, and are remember'd: But in all cases, wherein we reason concerning them, there is only one perceiv'd or remember'd, and the other is supply'd in conformity to our past experience.

Thus in advancing we have insensibly discover'd a new relation betwixt cause and effect, when we least expected it, and were entirely employ'd upon another subject. This relation is their CONSTANT CONJUNCTION. Contiguity and succession are not sufficient to make us pronounce any two objects to be cause and effect, unless we perceive, that these two relations are preserv'd in several instances. We may now see the advantage of quitting the direct survey of this relation, in order to discover the nature of that *necessary connexion*, which makes so essential a part of it. There are hopes, that by this means we may at last arrive at our propos'd end; tho' to tell the truth, this new-discover'd relation of a constant conjunction seems to advance us but very little in our way. For it implies no more than this, that like objects have always been plac'd in like relations of contiguity and succession; and it seems evident, at least at first sight, that by this means we can never discover any new

idea, and can only multiply, but not enlarge the objects of our mind. It may be thought, that what we learn not from one object, we can never learn from a hundred, which are all of the same kind, and are perfectly resembling in every circumstance. As our senses shew us in one instance two bodies, or motions, or qualities in certain relations of succession and contiguity; so our memory presents us only with a multitude of instances, wherein we always find like bodies, motions, or qualities in like relations. From the mere repetition of any past impression, even to infinity, there never will arise any new idea, such as that of a necessary connexion; and the number of impressions has in this case no more effect than if we confin'd ourselves to one only. But tho' this reasoning seems just and obvious; yet as it wou'd be folly to despair too soon, we shall continue the thread of our discourse; and having found, that after the discovery of the constant conjunction of any objects, we always draw an inference from one object to another, we shall now examine the nature of that inference, and of the transition from the impression to the idea. Perhaps 'twill appear in the end, that the necessary connexion depends on the inference, instead of the inference's depending on the necessary connexion.

Since it appears, that the transition from an impression present to the memory or senses to the idea of an object, which we call cause or effect, is founded on past *experience*, and on our remembrance of their *constant conjunction*, the next question is, Whether experience produces the idea by means of the understanding or imagination; whether we are determin'd by reason to make the transition, or by a certain association and relation of perceptions. If reason determin'd us, it wou'd proceed upon that principle, *that instances, of which we have had no experience, must resemble those, of which we have had experience, and that the course of nature continues always uniformly the same*. In order therefore to clear up this matter, let us consider all the arguments, and as these must be deriv'd either from *knowledge* or *probability*, let us cast our eye on each of these degrees of evidence, and see whether they afford any just conclusion of this nature.

Our foregoing method of reasoning will easily convince us, that there can be no *demonstrative* arguments to prove, *that those instances, of which we have had no experience, resemble those, of which we have had experience*. We can at least conceive a change in the

course of nature; which sufficiently proves, that such a change is not absolutely impossible. To form a clear idea of any thing, is an undeniable argument for its possibility, and is alone a refutation of any pretended demonstration against it.

Probability, as it discovers not the relations of ideas, consider'd as such, but only those of objects, must in some respects be founded on the impressions of our memory and senses, and in some respects on our ideas. Were there no mixture of any impression in our probable reasonings, the conclusion wou'd be entirely chimerical: And were there no mixture of ideas, the action of the mind, in observing the relation, wou'd, properly speaking, be sensation, not reasoning. 'Tis therefore necessary, that in all probable reasonings there be something present to the mind, either seen or remember'd; and that from this we infer something connected with it, which is not seen nor remember'd.

The only connexion or relation of objects, which can lead us beyond the immediate impressions of our memory and senses, is that of cause and effect; and that because 'tis the only one, on which we can found a just inference from one object to another. The idea of cause and effect is deriv'd from *experience*, which informs us, that such particular objects, in all past instances, have been constantly conjoin'd with each other: And as an object similar to one of these is suppos'd to be immediately present in its impression, we thence presume on the existence of one similar to its usual attendant. According to this account of things, which is, I think, in every point unquestionable, probability is founded on the presumption of a resemblance betwixt those objects, of which we have had experience, and those, of which we have had none; and therefore 'tis impossible this presumption can arise from probability. The same principle cannot be both the cause and effect of another; and this is, perhaps, the only proposition concerning that relation, which is either intuitively or demonstratively certain.

Shou'd any one think to elude this argument; and without determining whether our reasoning on this subject be deriv'd from demonstration or probability, pretend that all conclusions from causes and effects are built on solid reasoning: I can only desire, that this reasoning may be produc'd, in order to be expos'd to our examination. It may, perhaps, be said, that after experience of the constant conjunction of certain objects, we reason in the following

manner. Such an object is always found to produce another. 'Tis impossible it cou'd have this effect, if it was not endow'd with a power of production. The power necessarily implies the effect; and therefore there is a just foundation for drawing a conclusion from the existence of one object to that of its usual attendant. The past production implies a power: The power implies a new production: And the new production is what we infer from the power and the past production.

'Twere easy for me to shew the weakness of this reasoning, were I willing to make use of those observations, I have already made, that the idea of *production* is the same with that of *causation*, and that no existence certainly and demonstratively implies a power in any other object; or were it proper to anticipate what I shall have occasion to remark afterwards concerning the idea we form of *power* and *efficacy*. But as such a method of proceeding may seem either to weaken my system, by resting one part of it on another, or to breed a confusion in my reasoning, I shall endeavour to maintain my present assertion without any such assistance.

It shall therefore be allow'd for a moment, that the production of one object by another in any one instance implies a power; and that this power is connected with its effect. But it having been already prov'd, that the power lies not in the sensible qualities of the cause; and there being nothing but the sensible qualities present to us; I ask, why in other instances you presume that the same power still exists, merely upon the appearance of these qualities? Your appeal to past experience decides nothing in the present case; and at the utmost can only prove, that that very object, which produc'd any other, was at that very instant endow'd with such a power; but can never prove, that the same power must continue in the same object or collection of sensible qualities; much less, that a like power is always conjoin'd with like sensible qualities. Shou'd it be said, that we have experience, that the same power continues united with the same object, and that like objects are endow'd with like powers, I wou'd renew my question, *why from this experience we form any conclusion beyond those past instances, of which we have had experience*. If you answer this question in the same manner as the preceding, your answer gives still occasion to a new question of the same kind, even *in infinitum*; which clearly proves, that the foregoing reasoning had no just foundation.

Thus not only our reason fails us in the discovery of the *ultimate connexion* of causes and effects, but even after experience has inform'd us of their *constant conjunction*, 'tis impossible for us to satisfy ourselves by our reason, why we shou'd extend that experience beyond those particular instances, which have fallen under our observation. We suppose, but are never able to prove, that there must be a resemblance betwixt those objects, of which we have had experience, and those which lie beyond the reach of our discovery.

We have already taken notice of certain relations, which make us pass from one object to another, even tho' there be no reason to determine us to that transition; and this we may establish for a general rule, that wherever the mind constantly and uniformly makes a transition without any reason, it is influenc'd by these relations. Now this is exactly the present case. Reason can never shew us the *connexion* of one object with another, tho' aided by experience, and the observation of their constant conjunction in all past instances. When the mind, therefore, passes from the idea or impression of one object to the idea or belief of another, it is not determin'd by reason, but by certain principles, which associate together the ideas of these objects, and unite them in the imagination. Had ideas no more union in the fancy than objects seem to have to the understanding, we cou'd never draw any inference from causes to effects, nor repose belief in any matter of fact. The inference, therefore, depends solely on the union of ideas.

The principles of union among ideas, I have reduc'd to three general ones, and have asserted, that the idea or impression of any object naturally introduces the idea of any other object, that is resembling, contiguous to, or connected with it. These principles I allow to be neither the *infallible* nor the *sole* causes of an union among ideas. They are not the infallible causes. For one may fix his attention during some time on any one object without looking farther. They are not the sole causes. For the thought has evidently a very irregular motion in running along its objects, and may leap from the heavens to the earth, from one end of the creation to the other, without any certain method or order. But tho' I allow this weakness in these three relations, and this irregularity in the imagination; yet I assert that the only *general* principles, which associate ideas, are resemblance, contiguity and causation.

There is indeed a principle of union among ideas, which at first

sight may be esteem'd different from any of these, but will be found at the bottom to depend on the same origin. When ev'ry individual of any species of objects is found by experience to be constantly united with an individual of another species, the appearance of any new individual of either species naturally conveys the thought to its usual attendant. Thus because such a particular idea is commonly annex'd to such a particular word, nothing is requir'd but the hearing of that word to produce the correspondent idea; and 'twill scarce be possible for the mind, by its utmost efforts, to prevent that transition. In this case it is not absolutely necessary, that upon hearing such a particular sound, we shou'd reflect on any past experience, and consider what idea has been usually connected with the sound. The imagination of itself supplies the place of this reflection, and is so accusom'd to pass from the word to the idea, that it interposes not a moment's delay betwixt the hearing of the one, and the conception of the other.

But tho' I acknowledge this to be a true principle of association among ideas, I assert it to be the very same with that betwixt the ideas of cause and effect, and to be an essential part in all our reasonings from that relation. We have no other notion of cause and effect, but that of certain objects, which have been *always conjoin'd* together, and which in all past instances have been found inseparable. We cannot penetrate into the reason of the conjunction. We only observe the thing itself, and always find that from the constant conjunction the objects acquire an union in the imagination. When the impression of one becomes present to us, we immediately form an idea of its usual attendant; and consequently we may establish this as one part of the definition of an opinion or belief, that 'tis *an idea related to or associated with a present impression*.

Thus tho' causation be a *philosophical* relation, as implying contiguity, succession, and constant conjunction, yet 'tis only so far as it is a *natural* relation, and produces an union among our ideas, that we are able to reason upon it, or draw any inference from it.

SEC. VII. *Of the Nature of the Idea or Belief*

The idea of an object is an essential part of the belief of it, but not the whole. We conceive many things, which we do not believe.

In order then to discover more fully the nature of belief, or the qualities of those ideas we assent to, let us weigh the following considerations.

'Tis evident, that all reasonings from causes or effects terminate in conclusions, concerning matter of fact; that is, concerning the existence of objects or of their qualities. 'Tis also evident, that the idea of existence is nothing different from the idea of any object, and that when after the simple conception of any thing we wou'd conceive it as existent, we in reality make no addition to or alteration on our first idea. Thus when we affirm, that God is existent, we simply form the idea of such a being, as he is represented to us; nor is the existence, which we attribute to him, conceiv'd by a particular idea, which we join to the idea of his other qualities, and can again separate and distinguish from them. But I go farther; and not content with asserting, that the conception of the existence of any object is no addition to the simple conception of it, I likewise maintain, that the belief of the existence joins no new ideas to those, which compose the idea of the object. When I think of God, when I think of him as existent, and when I believe him to be existent, my idea of him neither encreases nor diminishes. But as 'tis certain there is a great difference betwixt the simple conception of the existence of an object and the belief of it, and as this difference lies not in the parts or composition of the idea, which we conceive; it follows, that it must lie in the *manner*, in which we conceive it.

Suppose a person present with me, who advances propositions, to which I do not assent, *that Caesar dy'd in his bed, that silver is more fusible than lead, or mercury heavier than gold*; 'tis evident, that notwithstanding my incredulity, I clearly understand his meaning, and form all the same ideas, which he forms. My imagination is endow'd with the same powers as his; nor is it possible for him to conceive any idea, which I cannot conceive; nor conjoin any, which I cannot conjoin. I therefore ask, Wherein consists the difference betwixt believing and disbelieving any proposition? The answer is easy with regard to propositions, that are prov'd by intuition or demonstration. In that case, the person, who assents, not only conceives the ideas according to the proposition, but is necessarily determin'd to conceive them in that particular manner, either immediately or by the interposition of other ideas. Whatever is absurd is unintelligible; nor is it possible for the imagination to con-

ceive any thing contrary to a demonstration. But as in reasonings from causation, and concerning matters of fact, this absolute necessity cannot take place, and the imagination is free to conceive both sides of the question, I still ask, *Wherein consists the difference betwixt incredulity and belief?* since in both cases the conception of the idea is equally possible and requisite.

'Twill not be a satisfactory answer to say, that a person, who does not assent to a proposition you advance; after having conceiv'd the object in the same manner with you; immediately conceives it in a different manner, and has different ideas of it. This answer is unsatisfactory; not because it contains any falshood, but because it discovers not all the truth. 'Tis confest, that in all cases, wherein we dissent from any person, we conceive both sides of the question; but as we can believe only one, it evidently follows, that the belief must make some difference betwixt that conception to which we assent, and that from which we dissent. We may mingle, and unite, and separate, and confound, and vary our ideas in a hundred different ways; but 'till there appears some principle, which fixes one of these different situations, we have in reality no opinion: And this principle, as it plainly makes no addition to our precedent ideas, can only change the *manner* of our conceiving them.

All the perceptions of the mind are of two kinds, *viz.* impressions and ideas, which differ from each other only in their different degrees of force and vivacity. Our ideas are copy'd from our impressions, and represent them in all their parts. When you wou'd any way vary the idea of a particular object, you can only encrease or diminish its force and vivacity. If you make any other change on it, it represents a different object or impression. The case is the same as in colours. A particular shade of any colour may acquire a new degree of liveliness or brightness without any other variation. But when you produce any other variation, 'tis no longer the same shade or colour. So that as belief does nothing but vary the manner, in which we conceive any object, it can only bestow on our ideas an additional force and vivacity. An opinion, therefore, or belief may be most accurately defined, A LIVELY IDEA RELATED TO OR ASSOCIATED WITH A PRESENT IMPRESSION.¹³

¹³ We may here take occasion to observe a very remarkable error, which being frequently inculcated in the schools, has become a kind of establish'd maxim, and is

Here are the heads of those arguments, which lead us to this conclusion. When we infer the existence of an object from that of others, some object must always be present either to the memory or senses, in order to be the foundation of our reasoning; since the mind cannot run up with its inferences *in infinitum*. Reason can never satisfy us that the existence of any one object does ever imply that of another; so that when we pass from the impression of one to the idea or belief of another, we are not determin'd by reason, but by custom or a principle of association. But belief is somewhat more than a simple idea. 'Tis a particular manner of forming an idea: And as the same idea can only be vary'd by a variation of its degrees of force and vivacity; it follows upon the whole, that belief is a lively idea produc'd by a relation to a present impression, according to the foregoing definition.

This operation of the mind, which forms the belief of any matter of fact, seems hitherto to have been one of the greatest mysteries of philosophy; tho' no one has so much as suspected, that there was

universally received by all logicians. This error consists in the vulgar division of the acts of the understanding, into *conception*, *judgment* and *reasoning*, and in the definitions we give of them. Conception is defin'd to be the simple survey of one or more ideas: Judgment to be the separating or uniting of different ideas: Reasoning to be the separating or uniting of different ideas by the interposition of others, which show the relation they bear to each other. But these distinctions and definitions are faulty in very considerable articles. For *first*, 'tis far from being true, that in every judgment, which we form, we unite two different ideas; since in that proposition, *God is*, or indeed any other, which regards existence, the idea of existence is no distinct idea, which we unite with that of the object, and which is capable of forming a compound idea by the union. *Secondly*, As we can thus form a proposition, which contains only one idea, so we may exert our reason without employing more than two ideas, and without having recourse to a third to serve as a medium betwixt them. We infer a cause immediately from its effect; and this inference is not only a true species of reasoning, but the strongest of all others, and more convincing than when we interpose another idea to connect the two extremes. What we may in general affirm concerning these three acts of the understanding is, that taking them in a proper light, they all resolve themselves into the first, and are nothing but particular ways of conceiving our objects. Whether we consider a single object, or several; whether we dwell on these objects, or run from them to others; and in whatever form or order we survey them, the act of the mind exceeds not a simple conception; and the only remarkable difference, which occurs on this occasion, is, when we join belief to the conception, and are persuaded of the truth of what we conceive. This act of the mind has never yet been explain'd by any philosopher; and therefore I am at liberty to propose my hypothesis concerning it; which is, that 'tis only a strong and steady conception of any idea, and such as approaches in some measure to an immediate impression.

any difficulty in explaining it. For my part I must own that I find considerable difficulty in the case; and that even when I think I understand the subject perfectly, I am at a loss for terms to express my meaning. I conclude, by an induction which seems to me very evident, that an opinion or belief is nothing but an idea, that is different from a fiction, not in the nature, or the order of its parts, but in the *manner* of its being conceiv'd. But when I wou'd explain this *manner*, I scarce find any word that fully answers the case, but am oblig'd to have recourse to every one's feeling, in order to give him a perfect notion of this operation of the mind. An idea assented to *feels* different from a fictitious idea, that the fancy alone presents to us: And this different feeling I endeavour to explain by calling it a superior *force*, or *vivacity*, or *solidity*, or *firminess*, or *steadiness*. This variety of terms, which may seem so unphilosophical, is intended only to express that act of the mind, which renders realities more present to us than fictions, causes them to weigh more in the thought, and gives them a superior influence on the passions and imagination. Provided we agree about the thing, 'tis needless to dispute about the terms. The imagination has the command over all its ideas, and can join, and mix, and vary them in all the ways possible. It may conceive objects with all the circumstances of place and time. It may set them, in a manner, before our eyes in their true colours, just as they might have existed. But as it is impossible, that that faculty can ever, of itself, reach belief, 'tis evident, that belief consists not in the nature and order of our ideas, but in the manner of their conception, and in their feeling to the mind. . . . I confess, that 'tis impossible to explain perfectly this feeling or manner of conception. We may make use of words, that express something near it. But its true and proper name is *belief*, which is a term that every one sufficiently understands in common life. And in philosophy we can go no farther, than assert, that it is something *felt* by the mind, which distinguishes the ideas of the judgment from the fictions of the imagination. 'It gives them more force and influence; makes them appear of greater importance; infixes them in the mind; and renders them the governing principles of all our actions.

This definition will also be found to be entirely conformable to every one's feeling and experience. Nothing is more evident, than that those ideas, to which we assent, are more strong, firm and

vivid, than the loose reveries of a castlebuilder. If one person sits down to read a book as a romance, and another as a true history, they plainly receive the same ideas, and in the same order; nor does the incredulity of the one, and the belief of the other hinder them from putting the very same ideas in both; tho' his testimony has not the same influence on them. The latter has a more lively conception of all the incidents. He enters deeper into the concerns of the persons: represents to himself their actions, and characters; and friendships, and enmities: He even goes so far as to form a notion of their features, and air, and person. While the former, who gives no credit to the testimony of the author, has a more faint and languid conception of all these particulars; and except on account of the style and ingenuity of the composition, can receive little entertainment from it.

SEC. VIII. *Of the Causes of Belief*

Having thus explain'd the nature of belief, and shewn that it consists in a lively idea related to a present impression; let us now proceed to examine from what principles it is deriv'd, and what bestows the vivacity on the idea.

I wou'd willingly establish it as a general maxim in the science of human nature, *that when any impression becomes present to us, it not only transports the mind to such ideas as are related to it, but likewise communicates to them a share of its force and vivacity.* All the operations of the mind depend in a great measure on its disposition, when it performs them; and according as the spirits are more or less elevated, and the attention more or less fix'd, the action will always have a more or less vigour and vivacity. When therefore any object is presented, which elevates and enlivens the thought, every action, to which the mind applies itself, will be more strong and vivid, as long as that disposition continues. Now 'tis evident the continuance of the disposition depends entirely on the objects, about which the mind is employ'd; and that any new object naturally gives a new direction to the spirits, and changes the disposition; as on the contrary, when the mind fixes constantly on the same object, or passes easily and insensibly along related objects, the disposition has a much longer duration. Hence it happens, that when the mind is once enliven'd by a present impression, it proceeds to form a

more lively idea of the related objects, by a natural transition of the disposition from the one to the other. The change of the objects is so easy, that the mind is scarce sensible of it, but applies itself to the conception of the related idea with all the force and vivacity it acquir'd from the present impression.

If in considering the nature of relation, and that facility of transition, which is essential to it, we can satisfy ourselves concerning the reality of this phaenomenon, 'tis well: But I must confess I place my chief confidence in experience to prove so material a principle. We may, therefore, observe, as the first experiment to our present purpose, that upon the appearance of the picture of an absent friend, our idea of him is evidently inliven'd by the *resemblance*, and that every passion, which that idea occasions, whether of joy or sorrow, acquires new force and vigour. In producing this effect there concur both a relation and a present impression. Where the picture bears him no resemblance, or at least was not intended for him, it never so much as conveys our thought to him: And where it is absent, as well as the person; tho' the mind may pass from the thought of the one to that of the other; it feels its idea to be rather weaken'd than inliven'd by that transition. We take a pleasure in viewing the picture of a friend, when 'tis set before us; but when 'tis remov'd, rather choose to consider him directly, than by reflexion in an image, which is equally distant and obscure.

The ceremonies of the *Roman Catholic* religion may be consider'd as experiments of the same nature. The devotees of that strange superstition usually plead in excuse of the mummeries, with which they are upbraided, that they feel the good effect of those external motions, and postures, and actions, in inlivening their devotion, and quickening their fervour, which otherwise wou'd decay away, if directed entirely to distant and immaterial objects. We shadow out the objects of our faith, say they, in sensible types and images, and render them more present to us by the immediate presence of these types, than 'tis possible for us to do merely by an intellectual view and contemplation. Sensible objects have always a greater influence on the fancy than any other; and this influence they readily convey to those ideas, to which they are related, and which they resemble. I shall only infer from these practices, and this reasoning, that the effect of resemblance in inlivening the idea is very

common; and as in every case a resemblance and a present impression must concur, we are abundantly supply'd with experiments to prove the reality of the foregoing principle.

We may add force to these experiments by others of a different kind, in considering the effects of *contiguity*, as well as of *resemblance*. 'Tis certain, that distance diminishes the force of every idea, and that upon our approach to any object; tho' it does not discover itself to our senses; it operates upon the mind with an influence that imitates an immediate impression. The thinking on any object readily transports the mind to what is contiguous; but 'tis only the actual presence of an object, that transports it with a superior vivacity. When I am a few miles from home, whatever relates to it touches me more nearly than when I am two hundred leagues distant; tho' even at that distance the reflecting on any thing in the neighbourhood of my friends and family naturally produces an idea of them. But as in this latter case, both the objects of the mind are ideas; notwithstanding there is an easy transition betwixt them; that transition alone is not able to give a superior vivacity to any of the ideas, for want of some immediate impression.¹⁴

No one can doubt but causation has the same influence as the other two relations of resemblance and contiguity. Superstitious people are fond of the relicks of saints and holy men, for the same reason that they seek after types and images, in order to inliven their devotion, and give them a more intimate and strong conception of those exemplary lives, which they desire to imitate. Now 'tis evident, one of the best relicks a devotee cou'd procure, wou'd be the handywork of a saint; and if his cloaths and furniture are ever to be consider'd in this light, 'tis because they were once at his

¹⁴ [The following note was added in the Appendix: "Naturane nobis, inquit, datum dicam, an errore quodam, ut, cum ea loca videamus, in quibus memoria dignos viros acceperimus multum esse versatos, magis moveamur, quam siquando eorum ipsorum aut facta audiamus, aut scriptum aliquod legamus? velut ego nunc moveor. Venit enim mihi Platonis in mentem: quem accipimus primum hîc disputare solitum: Cujus etiam illi hortuli propinqui non memoriam solûm mihi afferunt, sed ipsum videntur in conspectu meo hic ponere. Hic Speusippus, hic Xenocrates, hic ejus auditor Polemo; cujus ipsa illa sessio fuit, quam videamus. Equidem etiam curiam nostram, hostiliam dico, non hanc novam, quae mihi minor esse videtur postquam est major, solebam intuens Scipionem, Catonem, Laelium, nostrum vero in primis avum cogitare. Tanta vis admonitionis inest in locis; ut non sine causa ex his memoriae ducta sit disciplina.—Cicero de Finibus, lib. 5."]

disposal, and were mov'd and affected by him; in which respect they are to be consider'd as imperfect effects, and as connected with him by a shorter chain of consequences than any of those, from which we learn the reality of his existence. This phaenomenon clearly proves, that a present impression with a relation of causation may inliven any idea, and consequently produce belief or assent, according to the precedent definition of it.

But why need we seek for other arguments to prove, that a present impression with a relation or transition of the fancy may inliven any idea, when this very instance of our reasonings from cause and effect will alone suffice to that purpose? 'Tis certain we must have an idea of every matter of fact, which we believe. 'Tis certain, that this idea arises only from a relation to a present impression. 'Tis certain, that the belief super-adds nothing to the idea, but only changes our manner of conceiving it, and renders it more strong and lively. The present conclusion concerning the influence of relation is the immediate consequence of all these steps; and every step appears to me sure and infallible. There enters nothing into this operation of the mind but a present impression, a lively idea, and a relation or association in the fancy betwixt the impression and idea; so that there can be no suspicion of mistake.

In order to put this whole affair in a fuller light, let us consider it as a question in natural philosophy, which we must determine by experience and observation. I suppose there is an object presented, from which I draw a certain conclusion, and form to myself ideas, which I am said to believe or assent to. Here 'tis evident, that however that object, which is present to my senses, and that other, whose existence I infer by reasoning, may be thought to influence each other by their particular powers or qualities; yet as the phaenomenon of belief, which we at present examine, is merely internal, these powers and qualities, being entirely unknown, can have no hand in producing it. 'Tis the present impression, which is to be consider'd as the true and real cause of the idea, and of the belief which attends it. We must therefore endeavour to discover by experiments the particular qualities, by which 'tis enabled to produce so extraordinary an effect.

First then I observe, that the present impression has not this effect by its own proper power and efficacy, and when consider'd alone, as a single perception, limited to the present moment. I find,

that an impression, from which, on its first appearance, I can draw no conclusion, may afterwards become the foundation of belief, when I have had experience of its usual consequences. We must in every case have observ'd the same impression in past instances, and have found it to be constantly conjoin'd with some other impression. This is confirm'd by such a multitude of experiments, that it admits not of the smallest doubt.

From a second observation I conclude, that the belief, which attends the present impression, and is produc'd by a number of past impressions and conjunctions; that this belief, I say, arises immediately, without any new operation of the reason or imagination. Of this I can be certain, because I never am conscious of any such operation, and find nothing in the subject, on which it can be founded. Now as we call every thing *CUSTOM*, which proceeds from a past repetition, without any new reasoning or conclusion, we may establish it as a certain truth, that all the belief, which follows upon any present impression, is deriv'd solely from that origin. When we are accusom'd to see two impressions conjoin'd together, the appearance or idea of the one immediately carries us to the idea of the other.

Being fully satisfy'd on this head, I make a third set of experiments, in order to know, whether any thing be requisite, beside the customary transition, toward the production of this phaenomenon of belief. I therefore change the first impression into an idea; and observe, that tho' the customary transition to the correlative idea still remains, yet there is in reality no belief nor perswasion. A present impression, then, is absolutely requisite to this whole operation; and when after this I compare an impression with an idea, and find that their only difference consists in their different degrees of force and vivacity, I conclude upon the whole, that belief is a more vivid and intense conception of an idea, proceeding from its relation to a present impression.

Thus all probable reasoning is nothing but a species of sensation. 'Tis not solely in poetry and music, we must follow our taste and sentiment, but likewise in philosophy. When I am convinc'd of any principle, 'tis only an idea, which strikes more strongly upon me. When I give the preference to one set of arguments above another, I do nothing but decide from my feeling concerning the superiority of their influence. Objects have no discoverable connexion to-

gether; nor is it from any other principle but custom operating upon the imagination, that we can draw any inference from appearance of one to the existence of another.

'Twill here be worth our observation, that the past experience, on which all our judgments concerning cause and effect depend, may operate on our mind in such an insensible manner as never to be taken notice of, and may even in some measure be unknown to us. A person, who stops short in his journey upon meeting a river in his way, foresees the consequences of his proceeding forward; and his knowledge of these consequences is convey'd to him by past experience, which informs him of such certain conjunctions of causes and effects. But can we think, that on this occasion he reflects on any past experience, and calls to remembrance instances, that he has seen or heard of, in order to discover the effects of water on animal bodies? No surely; this is not the method, in which he proceeds in his reasoning. The idea of sinking is so closely connected with that of water, and the idea of suffocating with that of sinking, that the mind makes the transition without the assistance of the memory. The custom operates before we have time for reflection. The objects seem so inseparable, that we interpose not a moment's delay in passing from the one to the other. But as this transition proceeds from experience, and not from any primary connexion betwixt the ideas, we must necessarily acknowledge, that experience may produce a belief and a judgment of causes and effects by a secret operation, and without being once thought of. This removes all pretext, if there yet remains any, for asserting that the mind is convinc'd by reasoning of that principle, *that instances of which we have no experience, must necessarily resemble those, of which we have*. For we here find, that the understanding or imagination can draw inferences from past experience, without reflecting on it; much more without forming any principle concerning it, or reasoning upon that principle.

In general we may observe, that in all the most establish'd and uniform conjunctions of causes and effects, such as those of gravity, impulse, solidity, &c. the mind never carries its view expressly to consider any past experience: Tho' in other associations of objects, which are more rare and unusual, it may assist the custom and transition of ideas by this reflection. Nay we find in some cases that the reflection produces the belief without the custom; or more

properly speaking, that the reflection produces the custom in an *oblique* and *artificial* manner. I explain myself. 'Tis certain, that not only in philosophy, but even in common life, we may attain the knowledge of a particular cause merely by one experiment, provided it be made with judgment, and after a careful removal of all foreign and superfluous circumstances. Now as after one experiment of this kind, the mind, upon the appearance either of the cause or the effect, can draw an inference concerning the existence of its correlative; and as a habit can never be acquir'd merely by one instance; it may be thought, that belief cannot in this case be esteem'd the effect of custom. But this difficulty will vanish, if we consider, that tho' we are here suppos'd to have had only one experiment of a particular effect, yet we have many millions to convince us of this principle; *that like objects, plac'd in like circumstances, will always produce like effects*; and as this principle has establish'd itself by a sufficient custom, it bestows an evidence and firmness on any opinion, to which it can be apply'd. The connexion of the ideas is not habitual after one experiment; but this connexion is comprehended under another principle, that is habitual; which brings us back to our hypothesis. In all cases we transfer our experience to instances, of which we have no experience, either *expressly* or *tacitly*, either *directly* or *indirectly*.

I must not conclude this subject without observing, that 'tis very difficult to talk of the operations of the mind with perfect propriety and exactness; because common language has seldom made any very nice distinctions among them, but has generally call'd by the same term all such as nearly resemble each other. And as this is a source almost inevitable of obscurity and confusion in the author; so it may frequently give rise to doubts and objections in the reader, which otherwise he wou'd never have dream'd of. Thus my general position, that an opinion or belief is *nothing but a strong and lively idea deriv'd from a present impression related to it*, may be liable to the following objection, by reason of a little ambiguity in those words *strong and lively*. It may be said, that not only an impression may give rise to reasoning, but that an idea may also have the same influence; especially upon my principle, *that all our ideas are deriv'd from correspondent impressions*. For suppose I form at present an idea, of which I have forgot the correspondent impression, I am able to conclude from this idea, that such an impression did once

exist; and as this conclusion is attended with belief, it may be ask'd, from whence are the qualities of force and vivacity deriv'd, which constitute this belief? And to this I answer very readily, *from the present idea*. For as this idea is not here consider'd, as the representation of any absent object, but as a real perception in the mind, of which we are intimately conscious, it must be able to bestow on whatever is related to it the same quality, call it *firmness, or solidity, or force, or vivacity*, with which the mind reflects upon it, and is assur'd of its present existence. The idea here supplies the place of an impression, and is entirely the same, so far as regards our present purpose.

Upon the same principles we need not be surpriz'd to hear of the remembrance of an idea; that is, of the idea of an idea, and of its force and vivacity superior to the loose conceptions of the imagination. In thinking of our past thoughts we not only delineate out the objects, of which we were thinking, but also conceive the action of the mind in the meditation, that certain *je-ne-scai-quoi*, of which 'tis impossible to give any definition or description, but which every one sufficiently understands. When the memory offers an idea of this, and represents it as past, 'tis easily conceiv'd how that idea may have more vigour and firmness, than when we think of a past thought, of which we have no remembrance.

After this any one will understand how we may form the idea of an impression and of an idea, and how we may believe the existence of an impression and of an idea.

SEC. IX. *Of the Effects of Other Relations and Other Habits*

[*This chapter deals with the effects on belief of other relations, like resemblance and contiguity, and with the effects of other customs—in particular, the effect of education.*]

... If we consider this argument from *education* in a proper light, 'twill appear very convincing; and the more so, that 'tis founded on one of the most common phaenomena, that is any where to be, met with. I am persuaded, that upon examination we shall find more than one half of those opinions, that prevail among mankind, to be owing to education, and that the principles, which are thus implicitly embrac'd, overballance those, which are owing either to abstract reasoning or experience. As liars, by the frequent repetition of their lies, come at last to remember them; so the judg-

ment, or rather the imagination, by the like means, may have ideas so strongly imprinted on it, and conceive them in so full a light, that they may operate upon the mind in the same manner with those, which the senses, memory or reason present to us. But as education is an artificial and not a natural cause, and as its maxims are frequently contrary to reason, and even to themselves in different times and places, it is never upon that account recogniz'd by philosophers; tho' in reality it be built almost on the same foundation of custom and repetition as our reasonings from causes and effects.¹⁵

SEC. X. *Of the Influence of Belief*

But tho' education be disclaim'd by philosophy, as a fallacious ground of assent to any opinion, it prevails nevertheless in the world, and is the cause why all systems are apt to be rejected at first as new and unusual. This perhaps will be the fate of what I have here advanc'd concerning *belief*, and tho' the proofs I have produc'd appear to me perfectly conclusive, I expect not to make many proselytes to my opinion. Men will scarce ever be persuaded, that effects of such consequence can flow from principles, which are seemingly so inconsiderable, and that the far greatest part of our reasonings with all our actions and passions, can be deriv'd from nothing but custom and habit. To obviate this objection, I shall here anticipate a little what wou'd more properly fall under our consideration afterwards, when we come to treat of the passions and the sense of beauty.

There is implanted in the human mind a perception of pain and pleasure, as the chief spring and moving principle of all its actions. But pain and pleasure have two ways of making their

¹⁵ In general we may observe, that as our assent to all probable reasonings is founded on the vivacity of ideas, it resembles many of those whimsies and prejudices, which are rejected under the opprobrious character of being the offspring of the imagination. By this expression it appears that the word, imagination, is commonly us'd in two different senses; and tho' nothing be more contrary to true philosophy, than this inaccuracy, yet in the following reasonings I have often been oblig'd to fall into it. When I oppose the imagination to the memory, I mean the faculty, by which we form our fainter ideas. When I oppose it to reason, I mean the same faculty, excluding only our demonstrative and probable reasonings. When I oppose it to neither, 'tis indifferent whether it be taken in the larger or more limited sense, or at least the context will sufficiently explain the meaning.

appearance in the mind; of which the one has effects very different from the other. They may either appear in impression to the actual feeling, or only in idea, as at present when I mention them. 'Tis evident the influence of these upon our actions is far from being equal. Impressions always actuate the soul, and that in the highest degree; but 'tis not every idea which has the same effect. Nature has proceeded with caution in this case, and seems to have carefully avoided the inconveniences of two extremes. Did impressions alone influence the will, we should every moment of our lives be subject to the greatest calamities; because, tho' we foresaw their approach, we should not be provided by nature with any principle of action, which might impel us to avoid them. On the other hand, did every idea influence our actions, our condition would not be much mended. For such is the unsteadiness and activity of thought, that the images of every thing, especially of goods and evils, are always wandering in the mind; and were it mov'd by every idle conception of this kind, it would never enjoy a moment's peace and tranquility.

Nature has, therefore, chosen a medium, and has neither bestow'd on every idea of good and evil the power of actuating the will, nor yet has entirely excluded them from this influence. Tho' an idle fiction has no efficacy, yet we find by experience, that the ideas of those objects, which we believe either are or will be existent, produce in a lesser degree the same effect with those impressions, which are immediately present to the senses and perception. The effect, then, of belief is to raise up a simple idea to an equality with our impressions, and bestow on it a like influence on the passions. This effect it can only have by making an idea approach an impression in force and vivacity. For as the different degrees of force make all the original difference betwixt an impression and an idea, they must of consequence be the source of all the differences in the effects of these perceptions, and their removal, in whole or in part, the cause of every new resemblance they acquire. Wherever we can make an idea approach the impressions in force and vivacity, it will likewise imitate them in its influence on the mind; and *vice versa*, where it imitates them in that influence, as in the present case, this must proceed from its approaching them in force and vivacity. Belief, therefore, since it causes an idea to imitate the effects of the impressions, must make

it resemble them in these qualities, and is nothing but *a more vivid and intense conception of any idea*. This, then, may both serve as an additional argument for the present system, and may give us a notion after what manner our reasonings from causation are able to operate on the will and passions.

As belief is almost absolutely requisite to the exciting our passions, so the passions in their turn are very favourable to belief; and not only such facts as convey agreeable emotions, but very often such as give pain, do upon that account become more readily the objects of faith and opinion. A coward, whose fears are easily awaken'd, readily assents to every account of danger he meets with; as a person of a sorrowful and melancholy disposition is very credulous of every thing, that nourishes his prevailing passion. When any affecting object is presented, it gives the alarm, and excites immediately a degree of its proper passion; especially in persons who are naturally inclined to that passion. This emotion passes by an easy transition to the imagination; and diffusing itself over our idea of the affecting object, makes us form that idea with greater force and vivacity, and consequently assent to it, according to the precedent system. Admiration and surprize have the same effect as the other passions; and accordingly we may observe, that among the vulgar, quacks and projectors meet with a more easy faith upon account of their magnificent pretensions, than if they kept themselves within the bounds of moderation. The first astonishment, which naturally attends their miraculous relations, spreads itself over the whole soul, and so vivifies and enlivens the idea, that it resembles the inferences we draw from experience. This is a mystery, with which we may be already a little acquainted, and which we shall have farther occasion to be let into in the progress of this treatise.

After this account of the influence of belief on the passions, we shall find less difficulty in explaining its effects on the imagination, however extraordinary they may appear. 'Tis certain we cannot take pleasure in any discourse, where our judgment gives no assent to those images which are presented to our fancy. The conversation of those who have acquir'd a habit of lying, tho' in affairs of no moment, never gives any satisfaction; and that because those ideas they present to us, not being attended with belief, make no impression upon the mind. Poets themselves, tho' liars by pro-

fession, always endeavour to give an air of truth to their fictions; and where that is totally neglected, their performances, however ingenious, will never be able to afford much pleasure. In short, we may observe, that even when ideas have no manner of influence on the will and passions, truth and reality are still requisite, in order to make them entertaining to the imagination.

But if we compare together all the phaenomena that occur on this head, we shall find, that truth, however necessary it may seem in all works of genius, has no other effect than to procure an easy reception for the ideas, and to make the mind acquiesce in them with satisfaction, or at least without reluctance. But as this is an effect, which may easily be supposed to flow from that solidity and force, which, according to my system, attend those ideas that are establish'd by reasonings from causation; it follows, that all the influence of belief upon the fancy may be explained from that system. Accordingly we may observe, that wherever that influence arises from any other principles beside truth or reality, they supply its place, and give an equal entertainment to the imagination. Poets have form'd what they call a poetical system of things, which tho' it be believ'd neither by themselves nor readers, is commonly esteem'd a sufficient foundation for any fiction. We have been so much accusom'd to the names of MARS, JUPITER, VENUS, that in the same manner as education infixes any opinion, the constant repetition of these ideas makes them enter into the mind with facility, and prevail upon the fancy, without influencing the judgment. In like manner tragedians always borrow their fable, or at least the names of their principal actors, from some known passage in history; and that not in order to deceive the spectators; for they will frankly confess, that truth is not in any circumstance inviolably observed; but in order to procure a more easy reception into the imagination for those extraordinary events, which they represent. But this is a precaution, which is not required of comic poets, whose personages and incidents, being of a more familiar kind, enter easily into the conception, and are received without any such formality, even tho' at first sight they be known to be fictitious, and the pure offspring of the fancy.

This mixture of truth and falshood in the fables of tragic poets not only serves our present purpose, by shewing, that the imagination can be satisfy'd without any absolute belief or assurance; but

may in another view be regarded as a very strong confirmation of this system. 'Tis evident, that poets make use of this artifice of borrowing the names of their persons, and the chief events of their poems, from history, in order to procure a more easy reception for the whole, and cause it to make a deeper impression on the fancy and affections. The several incidents of the piece acquire a kind of relation by being united into one poem or representation; and if any of these incidents be an object of belief, it bestows a force and vivacity on the others, which are related to it. The vividness of the first conception diffuses itself along the relations, and is convey'd, as by so many pipes or canals, to every idea that has any communication with the primary one. This, indeed, can never amount to a perfect assurance; and that because the union among the ideas is, in a manner, accidental: But still it approaches so near, in its influence, as may convince us, that they are deriv'd from the same origin. Belief must please the imagination by means of the force and vivacity which attends it; since every idea, which has force and vivacity, is found to be agreeable to that faculty.

To confirm this we may observe, that the assistance is mutual betwixt the judgment and fancy, as well as betwixt the judgment and passion; and that belief not only gives vigour to the imagination, but that a vigorous and strong imagination is of all talents the most proper to procure belief and authority. 'Tis difficult for us to withhold our assent from what is painted out to us in all the colours of eloquence; and the vivacity produc'd by the fancy is in many cases greater than that which arises from custom and experience. We are hurried away by the lively imagination of our author or companion; and even he himself is often a victim to his own fire and genius.

Nor will it be amiss to remark, that as a lively imagination very often degenerates into madness or folly, and bears it a great resemblance in its operations; so they influence the judgment after the same manner, and produce belief from the very same principles. When the imagination, from any extraordinary ferment of the blood and spirits, acquires such a vivacity as disorders all its powers and faculties, there is no means of distinguishing betwixt truth and falshood; but every loose fiction or idea, having the same influence as the impressions of the memory, or the conclusions of the judgment, is receiv'd on the same footing, and operates

with equal force on the passions. A present impression and a customary transition are now no longer necessary to inliven our ideas. Every chimera of the brain is as vivid and intense as any of those inferences, which we formerly dignify'd with the name of conclusions concerning matters of fact, and sometimes as the present impressions of the senses.

We may observe the same effect of poetry in a lesser degree; and this is common both to poetry and madness, that the vivacity they bestow on the ideas is not deriv'd from the particular situations or connexions of the objects of these ideas, but from the present temper and disposition of the person. But how great soever the pitch may be, to which this vivacity rises, 'tis evident, that in poetry it never has the same *feeling* with that which arises in the mind, when we reason, tho' even upon the lowest species of probability. The mind can easily distinguish betwixt the one and the other; and whatever emotion the poetical enthusiasm may give to the spirits, 'tis still the mere phantom of belief or persuasion. The case is the same with the idea, as with the passion it occasions. There is no passion of the human mind but what may arise from poetry; tho' at the same time the *feelings* of the passions are very different when excited by poetical fictions, from what they are when they arise from belief and reality. A passion, which is disagreeable in real life, may afford the highest entertainment in a tragedy, or epic poem. In the latter case, it lies not with that weight upon us: It feels less firm and solid: And has no other than the agreeable effect of exciting the spirits, and rousing the attention. The difference in the passions is a clear proof of a like difference in those ideas, from which the passions are deriv'd. Where the vivacity arises from a customary conjunction with a present impression; tho' the imagination may not, in appearance, be so much mov'd; yet there is always something more forcible and real in its actions, than in the fervors of poetry and eloquence. The force of our mental actions in this case, no more than in any other, is not to be measur'd by the apparent agitation of the mind. A poetical description may have a more sensible effect on the fancy, than an historical narration. It may collect more of those circumstances, that form a compleat image or picture. It may seem to set the object before us in more lively colours. But still the ideas it presents are different to the *feeling* from those, which arise from the

memory and the judgment. There is something weak and imperfect amidst all that seeming vehemence of thought and sentiment, which attends the fictions of poetry.

We shall afterwards have occasion to remark both the resemblances and differences betwixt a poetical enthusiasm, and a serious conviction. In the mean time I cannot forbear observing, that the great difference in their feeling proceeds in some measure from reflection and *general rules*. We observe, that the vigour of conception, which fictions receive from poetry and eloquence, is a circumstance merely accidental, of which every idea is equally susceptible; and that such fictions are connected with nothing that is real. This observation makes us only lend ourselves, so to speak to the fiction: But causes the idea to feel very different from the eternal establish'd persuasions founded on memory and custom. They are somewhat of the same kind: But the one is much inferior to the other, both in its causes and effects.

A like reflection on general rules keeps us from augmenting our belief upon every encrease of the force and vivacity of our ideas. Where an opinion admits of no doubt, or opposite probability, we attribute to it a full conviction; tho' the want of resemblance or contiguity, may render its force inferior to that of other opinions. 'Tis thus the understanding corrects the appearances of the senses, and makes us imagine, that an object at twenty foot distance seems even to the eye as large as one of the same dimensions at ten.

We may observe the same effect of poetry in a lesser degree; only with this difference, that the least reflection dissipates the illusions of poetry, and places the objects in their proper light. 'Tis however certain, that in the warmth of a poetical enthusiasm, a poet has a counterfeit belief, and even a kind of vision of his objects: And if there be any shadow of argument to support this belief, nothing contributes more to his full conviction than a blaze of poetical figures and images, which have their effect upon the poet himself, as well as upon his readers.

SEC. XI. *Of the Probability of Chances*

But in order to bestow on this system its full force and evidence, we must carry our eye from it a moment to consider its consequences, and explain from the same principles some other species of reasoning, which are deriv'd from the same origin.

Those philosophers, who have divided human reason into *knowledge and probability*, and have defin'd the first to be *that evidence, which arises from the comparison of ideas*, are oblig'd to comprehend all our arguments from causes or effects under the general term of probability. But tho' every one be free to use his terms in what sense he pleases; and accordingly in the precedent part of this discourse, I have follow'd this method of expression; 'tis however certain, that in common discourse we readily affirm, that many arguments from causation exceed probability, and may be receiv'd as a superior kind of evidence. One wou'd appear ridiculous, who wou'd say, that 'tis only probable the sun will rise tomorrow, or that all men must dye; tho' 'tis plain we have no further assurance of these facts, than what experience affords us. For this reason, 'twould perhaps be more convenient, in order at once to preserve the common signification of words, and mark the several degrees of evidence, to distinguish human reason into three kinds, viz. *that from knowledge, from proofs, and from probabilities*. By knowledge, I mean the assurance arising from the comparison of ideas. By proofs, those arguments, which are deriv'd from the relation of cause and effect, and which are entirely free from doubt and uncertainty. By probability, that evidence, which is still attended with uncertainty. 'Tis this last species of reasoning, I proceed to examine.

Probability or reasoning from conjecture may be divided into two kinds, viz. that which is founded on chance, and that which arises from *causes*. We shall consider each of these in order.

The idea of cause and effect is deriv'd from experience which presenting us with certain objects constantly conjoin'd with each other, produces such a habit of surveying them in that relation, that we cannot without a sensible violence survey them in any other. On the other hand, as chance is nothing real in itself, and, properly speaking, is merely the negation of a cause, its influence on the mind is contrary to that of causation; and 'tis essential to it, to leave the imagination perfectly indifferent, either to consider the existence or non-existence of that object, which is regarded as contingent. A cause traces the way to our thought, and in a manner forces us to survey such certain objects, in such certain relations. Chance can only destroy this determination of the

thought, and leave the mind in its native situation of indifference; in which, upon the absence of a cause, 'tis instantly re-instated.

Since therefore an entire indifference is essential to chance, no one chance can possibly be superior to another, otherwise than as it is compos'd of a superior number of equal chances. For if we affirm that one chance can, after any other manner, be superior to another, we must at the same time affirm, that there is something, which gives it the superiority, and determines the event rather to that side than the other: That is, in other words, we must allow of a cause, and destroy the supposition of chance; which we had before establish'd. A perfect and total indifference is essential to chance, and one total indifference can never in itself be either superior or inferior to another. This truth is not peculiar to my system, but is acknowledg'd by every one, that forms calculations concerning chances.

And here 'tis remarkable, that tho' chance and causation be directly contrary, yet 'tis impossible for us to conceive this combination of chances, which is requisite to render one hazard superior to another, without supposing a mixture of causes among the chances, and a conjunction of necessity in some particulars, with a total indifference in others. Where nothing limits the chances, every notion, that the most extravagant fancy can form, is upon a footing of equality; nor can there be any circumstance to give one the advantage above another. Thus unless we allow, that there are some causes to make the dice fall, and preserve their form in their fall, and lie upon some one of their sides, we can form no calculation concerning the laws of hazard. But supposing these causes to operate, and supposing likewise all the rest to be indifferent and to be determin'd by chance, 'tis easy to arrive at a notion of a superior combination of chances. A dye that has four sides mark'd with a certain number of spots, and only two with another, affords us an obvious and easy instance of this superiority. The mind is here limited by the causes to such a precise number and quality of the events; and at the same time is undetermin'd in its choice of any particular event.

Proceeding then in that reasoning, wherein we have advanc'd three steps; *that* chance is merely the negation of a cause, and produces a total indifference in the mind; *that* one negation of a cause and one total indifference can never be superior or inferior to an-

other; and *that* there must always be a mixture of causes among the chances, in order to be the foundation of any reasoning: We are next to consider what effect a superior combination of chances can have upon the mind, and after what manner it influences our judgment and opinion. Here we may repeat all the same arguments we employ'd in examining that belief, which arises from causes; and may prove, after the same manner, that a superior number of chances produces our assent neither by *demonstration* nor *probability*. 'Tis indeed evident, that we can never by the comparison of mere ideas make any discovery, which can be of consequence in this affair, and that 'tis impossible to prove with certainty, that any event must fall on that side where there is a superior number of chances. To suppose in this case any certainty, were to overthrow what we have establish'd concerning the opposition of chances and their perfect equality and indifference.

Shou'd it be said, that tho' in an opposition of chances 'tis impossible to determine with *certainty*, on which side the event will fall, yet we can pronounce with certainty, that 'tis more likely and probable, 'twill be on that side where there is a superior number of chances, than where there is an inferior: Shou'd this be said, I wou'd ask, what is here meant by *likelihood* and *probability*? The likelihood and probability of chances is a superior number of equal chances; and consequently when we say 'tis likely the event will fall on the side, which is superior, rather than on the inferior, we do no more than affirm, that where there is a superior number of chances there is actually a superior, and where there is an inferior there is an inferior; which are identical propositions, and of no consequence. The question is, by what means a superior number of equal chances operates upon the mind, and produces belief or assent; since it appears, that 'tis neither by arguments deriv'd from demonstration, nor from probability.

In order to clear up this difficulty, we shall suppose a person to take a dye, form'd after such a manner as that four of its sides are mark'd with one figure, or one number of spots, and two with another; and to put this dye into the box with an intention of throwing it: 'Tis plain, he must conclude the one figure to be more probable than the other, and give the preference to that which is inscribe'd on the greatest number of sides. He in a manner believes, that this will lie uppermost; tho' still with hesitation and

doubt, in proportion to the number of chances, which are contrary: And according as these contrary chances diminish, and the superiority increases on the other side, his belief acquires new degrees of stability and assurance. This belief arises from an operation of the mind upon the simple and limited object before us; and therefore its nature will be the more easily discover'd and explain'd. We have nothing but one single dye to contemplate, in order to comprehend one of the most curious operations of the understanding.

This dye, form'd as above, contains three circumstances worthy of our attention. *First*, Certain causes, such as gravity, solidity, a cubical figure, &c. which determine it to fall, to preserve its form in its fall, and to turn up one of its sides. *Secondly*, A certain number of sides, which are suppos'd indifferent. *Thirdly*, A certain figure inscrib'd on each side. These three particulars form the whole nature of the dye, so far as relates to our present purpose; and consequently are the only circumstances regarded by the mind in its forming a judgment concerning the result of such a throw. Let us, therefore, consider gradually and carefully what must be the influence of these circumstances on the thought and imagination.

First, We have already observ'd, that the mind is determin'd by custom to pass from any cause to its effect, and that upon the appearance of the one, 'tis almost impossible for it not to form an idea of the other. Their constant conjunction in past instances has produc'd such a habit in the mind, that it always conjoins them in its thought, and infers the existence of the one from that of its usual attendant. When it considers the dye as no longer supported by the box, it cannot without violence regard it as suspended in the air; but naturally places it on the table, and views it as turning up one of its sides. This is the effect of the intermingled causes, which are requisite to our forming any calculation concerning chances.

Secondly, 'Tis suppos'd, that tho' the dye be necessarily determin'd to fall, and turn up one of its sides, yet there is nothing to fix the particular side, but that this is determin'd entirely by chance. The very nature and essence of chance is a negation of causes, and the leaving the mind in a perfect indifference among those events, which are suppos'd contingent. When therefore the

thought is determin'd by the causes to consider the dye as falling and turning up one of its sides, the chances present all these sides as equal, and make us consider every one of them, one after another, as alike probable and possible. The imagination passes from the cause, *viz.* the throwing of the dye, to the effect, *viz.* the turning up one of the six sides; and feels a kind of impossibility both of stopping short in the way, and of forming any other idea. But as all these six sides are incompatible, and the dye cannot turn up above one at once, this principle directs us not to consider all of them at once as lying uppermost; which we look upon as impossible: Neither does it direct us with its entire force to any particular side; for in that case this side wou'd be consider'd as certain and inevitable; but it directs us to the whole six sides after such a manner as to divide its force equally among them. We conclude in general, that some one of them must result from the throw: We run all of them over in our minds: The determination of the thought is common to all; but no more of its force falls to the share of any one, than what is suitable to its proportion with the rest. 'Tis after this manner the original impulse, and consequently the vivacity of thought, arising from the causes, is divided and split in pieces by the intermingled chances.

We have already seen the influence of the two first qualities of the dye, *viz.* the *causes*, and the *number* and *indifference* of the sides, and have learn'd how they give an impulse to the thought, and divide that impulse into as many parts as there are unites in the number of sides. We must now consider the effects of the third particular, *viz.* the *figures* inscrib'd on each side. 'Tis evident that where several sides have the same figure inscrib'd on them, they must concur in their influence on the mind, and must unite upon one image or idea of a figure all those divided impulses, that were dispers'd over the several sides, upon which that figure is inscrib'd. Were the question only what side will be turn'd up, these are all perfectly equal, and no one cou'd ever have any advantage above another. But as the question is concerning the figure, and as the same figure is presented by more than one side; 'tis evident, that the impulses belonging to all these sides must re-unite in that one figure, and become stronger and more forcible by the union. Four sides are suppos'd in the present case to have the same figure inscrib'd on them, and two to have another figure. The impulses

of the former are, therefore, superior to those of the latter. But as the events are contrary, and 'tis impossible both these figures can be turn'd up; the impulses likewise become contrary, and the inferior destroys the superior, as far as its strength goes. The vivacity of the idea is always proportionable to the degrees of the impulse or tendency to the transition; and belief is the same with the vivacity of the idea, according to the precedent doctrine.

SEC. XII. *Of the Probability of Causes*

What I have said concerning the probability of chances can serve to no other purpose, than to assist us in explaining the probability of causes; since 'tis commonly allow'd by philosophers, that what the vulgar call chance is nothing but a secret and conceal'd cause. That species of probability, therefore, is what we must chiefly examine.

The probabilities of causes are of several kinds; but are all deriv'd from the same origin, *viz. the association of ideas to a present impression*. As the habit, which produces the association, arises from the frequent conjunction of objects, it must arrive at its perfection by degrees, and must acquire new force from each instance, that falls under our observation. The first instance has little or no force: The second makes some addition to it: The third becomes still more sensible; and 'tis by these slow steps, that our judgment arrives at a full assurance. But before it attains this pitch of perfection, it passes thro' several inferior degrees, and in all of them is only to be esteem'd a presumption or probability. The gradation, therefore, from probabilities to proofs is in many cases insensible; and the difference betwixt these kinds of evidence is more easily perceiv'd in the remote degrees, than in the near and contiguous.

'Tis worthy of remark on this occasion, that tho' the species of probability here explain'd be the first in order, and naturally takes place before any entire proof can exist, yet no one, who is arriv'd at the age of maturity, can any longer be acquainted with it. 'Tis true, nothing is more common than for people of the most advanc'd knowledge to have attain'd only an imperfect experience of many particular events; which naturally produces only an imperfect habit and transition: But then we must consider, that the

mind, having form'd another observation concerning the connexion of causes and effects, gives new force to its reasoning from that observation; and by means of it can build an argument on one single experiment, when duly prepar'd and examin'd. What we have found once to follow from any object, we conclude will for ever follow from it; and if this maxim be not always built upon as certain, 'tis not for want of a sufficient number of experiments, but because we frequently meet with instances to the contrary; which leads us to the second species of probability, where there is a *contrariety* in our experience and observation.

'Twou'd be very happy for men in the conduct of their lives and actions, were the same objects always conjoin'd together, and we had nothing to fear but the mistakes of our own judgment, without having any reason to apprehend the uncertainty of nature. But as 'tis frequently found, that one observation is contrary to another, and that causes and effects follow not in the same order, of which we have had experience, we are oblig'd to vary our reasoning on account of this uncertainty, and take into consideration the contrariety of events. The first question, that occurs on this head, is concerning the nature and causes of the contrariety.

The vulgar, who take things according to their first appearance, attribute the uncertainty of events to such an uncertainty in the causes, as makes them often fail of their usual influence, tho' they meet with no obstacle nor impediment in their operation. But philosophers observing, that almost in every part of nature there is contain'd a vast variety of springs and principles, which are hid, by reason of their minuteness or remoteness, find that 'tis at least possible the contrariety of events may not proceed from any contingency in the cause, but from the secret operation of contrary causes. This possibility is converted into certainty by further observation, when they remark, that upon an exact scrutiny, a contrariety of effects always betrays a contrariety of causes, and proceeds from their mutual hindrance and opposition. A peasant can give no better reason for the stopping of any clock or watch than to say, that commonly it does not go right: But an artizan easily perceives, that the same force in the spring or pendulum has always the same influence on the wheels; but fails of its usual effect, perhaps by reason of a grain of dust, which puts a stop to the whole movement. From the observation of several parallel in-

stances, philosophers form a maxim, that the connexion betwixt all causes and effects is equally necessary, and that its seeming uncertainty in some instances proceeds from the secret opposition of contrary causes.

But however philosophers and the vulgar may differ in their explication of the contrariety of events, their inferences from it are always of the same kind, and founded on the same principles. A contrariety of events in the past may give us a kind of hesitating belief for the future after two several ways. First, By producing an imperfect habit and transition from the present impression to the related idea. When the conjunction of any two objects is frequent, without being entirely constant, the mind is determin'd to pass from one object to the other; but not with so entire a habit, as when the union is uninterrupted, and all the instances we have ever met with are uniform and of a piece. We find from common experience, in our actions as well as reasonings, that a constant perseverance in any course of life produces a strong inclination and tendency to continue for the future; tho' there are habits of inferior degrees of force, proportion'd to the inferior degrees of steadiness and uniformity in our conduct.

There is no doubt that this principle sometimes takes place, and produces those inferences we draw from contrary phaenomena; tho' I am perswaded, that upon examination we shall not find it to be the principle, that most commonly influences the mind in this species of reasoning. When we follow only the habitual determination of the mind, we make the transition without any reflection, and interpose not a moment's delay betwixt the view of one object and the belief of that, which is often found to attend it. As the custom depends not upon any deliberation, it operates immediately, without allowing any time for reflection. But this method of proceeding we have but few instances of in our probable reasonings; and even fewer than in those, which are deriv'd from the uninterrupted conjunction of objects. In the former species of reasoning we commonly take knowingly into consideration the contrariety of past events; we compare the different sides of the contrariety, and carefully weigh the experiments, which we have on each side: Whence we may conclude, that our reasonings of this kind arise not *directly* from habit, but in an *oblique* manner; which we must now endeavour to explain.

'Tis evident, that when an object is attended with contrary effects, we judge of them only by our past experience, and always consider those as possible, which we have observ'd to follow from it. And as past experience regulates our judgment concerning the possibility of these effects, so it does that concerning their probability; and that effect, which has been the most common, we always esteem the most likely. Here then are two things to be consider'd, *viz.* the *reasons* which determine us to make the past a standard for the future, and the *manner* how we extract a single judgment from a contrariety of past events.

First we may observe, that the supposition, *that the future resembles the past*, is not founded on arguments of any kind, but is deriv'd entirely from habit, by which we are determin'd to expect for the future the same train of objects, to which we have been accustom'd. This habit or determination to transfer the past to the future is full and perfect; and consequently the first impulse of the imagination in this species of reasoning is endow'd with the same qualities.

But, *secondly*, when in considering past experiments we find them of a contrary nature, this determination, tho' full and perfect in itself, presents us with no steady object, but offers us a number of disagreeing images in a certain order and proportion. The first impulse, therefore, is here broke into pieces, and diffuses itself over all those images, of which each partakes an equal share of that force and vivacity, that is deriv'd from the impulse. Any of these past events may again happen; and we judge, that when they do happen, they will be mix'd in the same proportion as in the past. . . .

Thus upon the whole, contrary experiments produce an imperfect belief, either by weakening the habit, or by dividing and afterwards joining in different parts, that *perfect* habit, which makes us conclude in general, that instances, of which we have no experience, must necessarily resemble those of which we have.

To justify still farther this account of the second species of probability, where we reason with knowledge and reflection from a contrariety of past experiments, I shall propose the following considerations, without fearing to give offence by that air of subtilty, which attends them. Just reasoning ought still, perhaps, to

retain its force, however subtle; in the same manner as matter preserves its solidity in the air, and fire, and animal spirits, as well as in the grosser and more sensible forms.

First, We may observe, that there is no probability so great as not to allow of a contrary possibility; because otherwise 'twou'd cease to be a probability, and wou'd become a certainty. That probability of causes, which is most extensive, and which we at present examine, depends on a contrariety of experiments; and 'tis evident an experiment in the past proves at least a possibility for the future.

Secondly, The component parts of this possibility and probability are of the same nature, and differ in number only, but not in kind. It has been observ'd, that all single chances are entirely equal, and that the only circumstance, which can give any event, that is contingent, a superiority over another, is a superior number of chances. In like manner, as the uncertainty of causes is discover'd by experience, which presents us with a view of contrary events, 'tis plain, that when we transfer the past to the future, the known to the unknown, every past experiment has the same weight, and that 'tis only a superior number of them, which can throw the ballance on any side. The possibility, therefore, which enters into every reasoning of this kind, is compos'd of parts, which are of the same nature both among themselves, and with those, that compose the opposite probability.

Thirdly, We may establish it as a certain maxim, that in all moral as well as natural phaenomena, wherever any cause consists of a number of parts, and the effect encreases or diminishes, according to the variation of that number, the effect, properly speaking, is a compounded one, and arises from the union of the several effects, that proceed from each part of the cause. Thus, because the gravity of a body encreases or diminishes by the encrease or diminution of its parts, we conclude that each part contains this quality and contributes to the gravity of the whole. The absence or presence of a part of the cause is attended with that of a proportionable part of the effect. This connexion or constant conjunction sufficiently proves the one part to be the cause of the other. As the belief which we have of any event, encreases or diminishes according to the number of chances or past experiments, 'tis to be

consider'd as a compounded effect, of which each part arises from a proportionable number of chances or experiments.

Let us now join these three observations, and see what conclusion we can draw from them. To every probability there is an opposite possibility. This possibility is compos'd of parts, that are entirely of the same nature with those of the probability; and consequently have the same influence on the mind and understanding. The belief, which attends the probability, is a compounded effect, and is form'd by the concurrence of the several effects, which proceed from each part of the probability. Since therefore each part of the probability contributes to the production of the belief, each part of the possibility must have the same influence on the opposite side; the nature of these parts being entirely the same. The contrary belief, attending the possibility, implies a view of a certain object, as well as the probability does an opposite view. In this particular both these degrees of belief are alike. The only manner then, in which the superior number of similar component parts in the one can exert its influence, and prevail above the inferior in the other, is by producing a stronger and more lively view of its object. Each part presents a particular view; and all these views uniting together produce one general view, which is fuller and more distinct by the greater number of causes or principles, from which it is deriv'd.

The component parts of the probability and possibility, being alike in their nature, must produce like effects; and the likeness of their effects consists in this, that each of them presents a view of a particular object. But tho' these parts be alike in their nature, they are very different in their quantity and number; and this difference must appear in the effect as well as the similarity. Now as the view they present is in both cases full and entire, and comprehends the object in all its parts, 'tis impossible that in this particular there can be any difference; nor is there any thing but a superior vivacity in the probability, arising from the concurrence of a superior number of views, which can distinguish these effects. . . .

I am sensible how abstruse all this reasoning must appear to the generality of readers, who not being accusom'd to such profound reflections on the intellectual faculties of the mind, will be apt to

reject as chimerical whatever strikes not in with the common receiv'd notions, and with the easiest and most obvious principles of philosophy. And no doubt there are some pains requir'd to enter into these arguments; tho' perhaps very little are necessary to perceive the imperfection of every vulgar hypothesis on this subject, and the little light, which philosophy can yet afford us in such sublime and such curious speculations. Let men be once fully perswaded of these two principles, *That there is nothing in any object, consider'd in itself, which can afford us a reason for drawing a conclusion beyond it; and, That even after the observation of the frequent or constant conjunction of objects, we have no reason to draw any inference concerning any object beyond those of which we have had experience;* I say, let men be once fully convinc'd of these two principles, and this will throw them so loose from all common systems, that they will make no difficulty of receiving any, which may appear the most extraordinary. These principles we have found to be sufficiently convincing, even with regard to our most certain reasonings from causation: But I shall venture to affirm, that with regard to these conjectural or probable reasonings they still acquire a new degree of evidence.

First, 'Tis obvious, that in reasonings of this kind, 'tis not the object presented to us, which, consider'd in itself, affords us any reason to draw a conclusion concerning any other object or event. For as this latter object is suppos'd uncertain, and as the uncertainty is deriv'd from a conceal'd contrariety of causes in the former, were any of the causes plac'd in the known qualities of that object, they wou'd no longer be conceal'd, nor wou'd our conclusion be uncertain.

But, *secondly*, 'tis equally obvious in this species of reasoning, that if the transference of the past to the future were founded merely on a conclusion of the understanding, it cou'd never occasion any belief or assurance. When we transfer contrary experiments to the future, we can only repeat these contrary experiments with their particular proportions; which cou'd not produce assurance in any single event, upon which we reason, unless the fancy melted together all those images that concur, and extracted from them one single idea or image, which is intense and lively in proportion to the number of experiments from which it is deriv'd, and their superiority above their antagonists. Our past experience

presents no determinate object; and as our belief, however faint, fixes itself on a determinate object, 'tis evident that the belief arises not merely from the transference of past to future, but from some operation of the *fancy* conjoin'd with it. This may lead us to conceive the manner, in which that faculty enters into all our reasonings.

But beside these two species of probability, which are deriv'd from an *imperfect* experience and from *contrary* causes, there is a third arising from ANALOGY, which differs from them in some material circumstances. According to the hypothesis above explain'd all kinds of reasoning from causes or effects are founded on two particulars, viz. the constant conjunction of any two objects in all past experience, and the resemblance of a present object to any one of them. The effect of these two particulars is, that the present object invigorates and inlivens the imagination; and the resemblance, along with the constant union, conveys this force and vivacity to the related idea; which we are therefore said to believe, or assent to. If you weaken either the union or resemblance, you weaken the principle of transition, and of consequence that belief, which arises from it. The vivacity of the first impression cannot be fully convey'd to the related idea, either where the conjunction of their objects is not constant, or where the present impression does not perfectly resemble any of those, whose union we are accusom'd to observe. In those probabilities of chance and causes above-explain'd, 'tis the constancy of the union, which is diminish'd; and in the probability deriv'd from analogy, 'tis the resemblance only, which is affected. Without some degree of resemblance, as well as union, 'tis impossible there can be any reasoning: but as this resemblance admits of many different degrees, the reasoning becomes proportionably more or less firm and certain. An experiment loses of its force, when transferr'd to instances, which are not exactly resembling; tho' 'tis evident it may still retain as much as may be the foundation of probability, as long as there is any resemblance remaining.

SEC. XIII. *Of Unphilosophical Probability*

All these kinds of probability are receiv'd by philosophers, and allow'd to be reasonable foundations of belief and opinion. But

there are others, that are deriv'd from the same principles, tho' they have not had the good fortune to obtain the same sanction. The *first* probability of this kind may be accounted for thus. The diminution of the union, and of the resemblance, as above explained, diminishes the facility of the transition, and by that means weakens the evidence; and we may farther observe, that the same diminution of the evidence will follow from a diminution of the impression, and from the shading of those colours, under which it appears to the memory or senses. The argument, which we found on any matter of fact we remember, is more or less convincing, according as the fact is recent or remote; and tho' the difference in these degrees of evidence be not receiv'd by philosophy as solid and legitimate; because in that case an argument must have a different force to day, from what it shall have a month hence; yet notwithstanding the opposition of philosophy, 'tis certain, this circumstance has a considerable influence on the understanding, and secretly changes the authority of the same argument, according to the different times, in which it is propos'd to us. A greater force and vivacity in the impression naturally conveys a greater to the related idea; and 'tis on the degrees of force and vivacity, that the belief depends, according to the foregoing system.

There is a *second* difference, which we may frequently observe in our degrees of belief and assurance, and which never fails to take place, tho' disclaim'd by philosophers. An experiment, that is recent and fresh in the memory, affects us more than one that is in some measure obliterated; and has a superior influence on the judgment, as well as on the passions. A lively impression produces more assurance than a faint one; because it has more original force to communicate to the related idea, which thereby acquires a greater force and vivacity. A recent observation has a like effect; because the custom and transition is there more entire, and preserves better the original force in the communication. Thus a drunkard, who has seen his companion die of a debauch, is struck with that instance for some time, and dreads a like accident for himself: But as the memory of it decays away by degrees, his former security returns, and the danger seems less certain and real.

I add, as a *third* instance of this kind, that tho' our reasonings from proofs and from probabilities be considerably different from each other, yet the former species of reasoning often degenerates

insensibly into the latter, by nothing but the multitude of connected arguments. 'Tis certain, that when an inference is drawn immediately from an object, without any intermediate cause or effect, the conviction is much stronger, and the persuasion more lively, than when the imagination is carry'd thro' a long chain of connected arguments, however infallible the connexion of each link may be esteem'd. 'Tis from the original impression, that the vivacity of all the ideas is deriv'd, by means of the customary transition of the imagination; and 'tis evident this vivacity must gradually decay in proportion to the distance, and must lose somewhat in each transition. Sometimes this distance has a greater influence than even contrary experiments wou'd have; and a man may receive a more lively conviction from a probable reasoning, which is close and immediate, than from a long chain of consequences, tho' just and conclusive in each part. Nay 'tis seldom such reasonings produce any conviction; and one must have a very strong and firm imagination to preserve the evidence to the end, where it passes thro' so many stages.

But here it may not be amiss to remark a very curious phaenomenon, which the present subject suggests to us. 'Tis evident there is no point of ancient history, of which we can have any assurance, but by passing thro' many millions of causes and effects, and thro' a chain of arguments of almost an immeasurable length. Before the knowledge of the fact cou'd come to the first historian, it must be convey'd thro' many mouths; and after it is committed to writing, each new copy is a new object, of which the connexion with the foregoing is known only by experience and observation. Perhaps, therefore, it may be concluded from the precedent reasoning, that the evidence of all ancient history must now be lost; or at least, will be lost in time, as the chain of causes encreases, and runs on to a greater length. But as it seems contrary to common sense to think, that if the republic of letters, and the art of printing continue on the same footing as at present, our posterity, even after a thousand ages, can ever doubt if there has been such a man as JULIUS CAESAR; this may be consider'd as an objection to the present system. If belief consisted only in a certain vivacity, convey'd from an original impression, it wou'd decay by the length of the transition, and must at last be utterly extinguish'd: And *vice*

versa, if belief on some occasions be not capable of such an extinction; it must be something different from that vivacity.

Before I answer this objection I shall observe, that from this topic there has been borrow'd a very celebrated argument against the *Christian Religion*; but with this difference, that the connexion betwixt each link of the chain in human testimony has been there suppos'd not to go beyond probability, and to be liable to a degree of doubt and uncertainty. And indeed it must be confest, that in this manner of considering the subject, (which however is not a true one) there is no history or tradition, but what must in the end lose all its force and evidence. Every new probability diminishes the original conviction; and however great that conviction may be suppos'd, 'tis impossible it can subsist under such reiterated diminutions. This is true in general tho' we shall find afterwards,¹⁶ that there is one very memorable exception, which is of vast consequence in the present subject of the understanding.

Mean while to give a solution of the preceding objection upon the supposition, that historical evidence amounts at first to an entire proof; let us consider, that tho' the links are innumerable, that connect any original fact with the present impression, which is the foundation of belief; yet they are all of the same kind, and depend on the fidelity of Printers and Copyists. One edition passes into another, and that into a third, and so on, till we come to that volume we peruse at present. There is no variation in the steps. After we know one, we know all of them; and after we have made one, we can have no scruple as to the rest. This circumstance alone preserves the evidence of history, and will perpetuate the memory of the present age to the latest posterity. If all the long chain of causes and effects, which connect any past event with any volume of history, were compos'd of parts different from each other, and which 'twere necessary for the mind distinctly to conceive, 'tis impossible we shou'd preserve to the end any belief or evidence. But as most of these proofs are perfectly resembling, the mind runs easily along them, jumps from one part to another with facility, and forms but a confus'd and general notion of each link. By this means a long chain of argument, has as little effect in diminishing the original vivacity, as a much shorter wou'd have, if com-

¹⁶ Part IV. Section 1.

pos'd of parts, which were different from each other, and of which each requir'd a distinct consideration.

A fourth unphilosophical species of probability is that deriv'd from *general rules*, which we rashly form to ourselves, and which are the source of what we properly call PREJUDICE. An *Irishman* cannot have wit, and a *Frenchman* cannot have solidity; for which reason, tho' the conversation of the former in any instance be visibly very agreeable, and of the latter very judicious, we have entertain'd such a prejudice against them, that they must be dunces or fops in spite of sense and reason. Human nature is very subject to errors of this kind; and perhaps this nation as much as any other.

Shou'd it be demanded why men form general rules, and allow them to influence their judgment, even contrary to present observation and experience, I shou'd reply, that in my opinion it proceeds from those very principles, on which all judgments concerning causes and effects depend. Our judgments concerning cause and effect are deriv'd from habit and experience; and when we have been accustom'd to see one object united to another, our imagination passes from the first to the second, by a natural transition, which precedes reflection, and which cannot be prevented by it. Now 'tis the nature of custom not only to operate with its full force, when objects are presented, that are exactly the same with those to which we have been accustom'd; but also to operate in an inferior degree, when we discover such as are similar; and tho' the habit loses somewhat of its force by every difference, yet 'tis seldom entirely destroy'd, where any considerable circumstances remain the same. A man, who has contracted a custom of eating fruit by the use of pears or peaches, will satisfy himself with melons, where he cannot find his favourite fruit; as one, who has become a drunkard by the use of red wines, will be carried almost with the same violence to white, if presented to him. From this principle I have accounted for that species of probability, deriv'd from analogy, where we transfer our experience in past instances to objects which are resembling, but are not exactly the same with those concerning which we have had experience. In proportion as the resemblance decays, the probability diminishes; but still has some force as long as there remain any traces of the resemblance.

This observation we may carry farther; and may remark, that tho' custom be the foundation of all our judgments, yet sometimes

it has an effect on the imagination in opposition to the judgment, and produces a contrariety in our sentiments concerning the same object. I explain myself. In almost all kinds of causes there is a complication of circumstances, of which some are essential, and others superfluous; some are absolutely requisite to the production of the effect, and others are only conjoin'd by accident. Now we may observe, that when these superfluous circumstances are numerous, and remarkable, and frequently conjoin'd with the essential, they have such an influence on the imagination, that even in the absence of the latter they carry us on to the conception of the usual effect, and give to that conception a force and vivacity, which make it superior to the mere fictions of the fancy. We may correct this propensity by a reflection on the nature of those circumstances; but 'tis still certain, that custom takes the start, and gives a bias to the imagination.

To illustrate this by a familiar instance, let us consider the case of a man, who, being hung out from a high tower in a cage of iron cannot forbear trembling, when he surveys the precipice below him, tho' he knows himself to be perfectly secure from falling, by his experience of the solidity of the iron, which supports him; and tho' the ideas of fall and descent, and harm and death, be deriv'd solely from custom and experience. The same custom goes beyond the instances, from which it is deriv'd, and to which it perfectly corresponds; and influences his ideas of such objects as are in some respect resembling, but fall not precisely under the same rule. The circumstances of depth and descent strike so strongly upon him, that their influence cannot be destroy'd by the contrary circumstances of support and solidity, which ought to give him a perfect security. His imagination runs away with its object, and excites a passion proportion'd to it. That passion returns back upon the imagination and invivens the idea; which lively idea has a new influence on the passion, and in its turn augments its force and violence; and both his fancy and affections, thus mutually supporting each other, cause the whole to have a very great influence upon him.

But why need we seek for other instances, while the present subject of philosophical probabilities offers us so obvious an one, in the opposition betwixt the judgment and imagination arising from these effects of custom? According to my system, all reasonings

are nothing but the effects of custom; and custom has no influence, but by enlivening the imagination, and giving us a strong conception of any object. It may, therefore, be concluded, that our judgment and imagination can never be contrary, and that custom cannot operate on the latter faculty after such a manner, as to render it opposite to the former. This difficulty we can remove after no other manner, than by supposing the influence of general rules. We shall afterwards take notice of some general rules, by which we ought to regulate our judgment concerning causes and effects; and these rules are form'd on the nature of our understanding, and on our experience of its operations in the judgments we form concerning objects. By them we learn to distinguish the accidental circumstances from the efficacious causes; and when we find that an effect can be produc'd without the concurrence of any particular circumstance, we conclude that that circumstance makes not a part of the efficacious cause, however frequently conjoin'd with it. But as this frequent conjunction necessarily makes it have some effect on the imagination, in spite of the opposite conclusion from general rules, the opposition of these two principles produces a contrariety in our thoughts, and causes us to ascribe the one inference to our judgment, and the other to our imagination. The general rule is attributed to our judgment; as being more extensive and constant. The exception to the imagination; as being more capricious and uncertain.

Thus our general rules are in a manner set in opposition to each other. When an object appears, that resembles any cause in very considerable circumstances, the imagination naturally carries us to a lively conception of the usual effect, tho' the object be different in the most material and most efficacious circumstances from that cause. Here is the first influence of general rules. But when we take a review of this act of the mind, and compare it with the more general and authentic operations of the understanding, we find it to be of an irregular nature, and destructive of all the most establish'd principles of reasonings; which is the cause of our rejecting it. This is a second influence of general rules, and implies the condemnation of the former. Sometimes the one, sometimes the other prevails, according to the disposition and character of the person. The vulgar are commonly guided by the first, and wise men by the second. Mean while the sceptics may here have the pleasure of

observing a new and signal contradiction in our reason, and of seeing all philosophy ready to be subverted by a principle of human nature, and again sav'd by a new direction of the very same principle. The following of general rules is a very unphilosophical species of probability; and yet 'tis only by following them that we can correct this, and all other unphilosophical probabilities.

Since we have instances, where general rules operate on the imagination even contrary to the judgment, we need not be surpriz'd to see their effects encrease, when conjoin'd with that latter faculty, and to observe that they bestow on the ideas they present to us a force superior to what attends any other. Every one knows, there is an indirect manner of insinuating praise or blame, which is much less shocking than the open flattery or censure of any person. However he may communicate his sentiments by such secret insinuations, and make them known with equal certainty as by the open discovery of them, 'tis certain that their influence is not equally strong and powerful. One who lashes me with conceal'd strokes of satire, moves not my indignation to such a degree, as if he flatly told me I was a fool and coxcomb; tho' I equally understand his meaning, as if he did. This difference is to be attributed to the influence of general rules.

SEC. XIV. *Of the Idea of Necessary Connexion*

Having thus explain'd the manner, *in which we reason beyond our immediate impressions, and conclude that such particular causes must have such particular effects*; we must now return upon our footsteps to examine that question, which¹⁷ first occur'd to us, and which we dropt in our way, *viz. What is our idea of necessity, when we say that two objects are necessarily connected together*. Upon this head I repeat what I have often had occasion to observe, that as we have no idea that is not deriv'd from an impression, we must find some impression, that gives rise to this idea of necessity, if we assert we have really such an idea. In order to this I consider, in what objects necessity is commonly suppos'd to lie; and finding that it is always ascrib'd to causes and effects, I turn my eye to two objects suppos'd to be plac'd in that relation; and examine them in all the situations, of which they are susceptible.

¹⁷ Sec. 2.

I immediately perceive, that they are *contiguous* in time and place, and that the object we call cause *precedes* the other we call effect. In no one instance can I go any farther, nor is it possible for me to discover any third relation betwixt these objects. I therefore enlarge my view to comprehend several instances; where I find like objects always existing in like relations of contiguity and succession. At first sight this seems to serve but little to my purpose. The reflection on several instances only repeats the same objects; and therefore can never give rise to a new idea. But upon farther enquiry I find, that the repetition is not in every particular the same, but produces a new impression, and by that means the idea, which I at present examine. For after a frequent repetition, I find, that upon the appearance of one of the objects, the mind is *determin'd* by custom to consider its usual attendant, and to consider it in a stronger light upon account of its relation to the first object. 'Tis this impression, then, or determination, which affords me the idea of necessity.

I doubt not but these consequences will at first sight be receiv'd without difficulty, as being evident deductions from principles, which we have already establish'd, and which we have often employ'd in our reasonings. This evidence both in the first principles, and in the deductions, may seduce us unwarily into the conclusion, and make us imagine it contains nothing extraordinary, nor worthy of our curiosity. But tho' such an inadvertence may facilitate the reception of this reasoning, 'twill make it be the more easily forgot; for which reason I think it proper to give warning, that I have just now examin'd one of the most sublime questions in philosophy, *viz. that concerning the power and efficacy of causes*; where all the sciences seem so much interested. Such a warning will naturally rouse up the attention of the reader, and make him desire a more full account of my doctrine, as well as of the arguments, on which it is founded. This request is so reasonable, that I cannot refuse complying with it; especially as I am hopeful that these principles, the more they are examin'd, will acquire the more force and evidence.

There is no question, which on account of its importance, as well as difficulty, has caus'd more disputes both among antient and modern philosophers, than this concerning the efficacy of causes, or that quality which makes them be follow'd by their effects. But

before they enter'd upon these disputes, methinks it wou'd not have been improper to have examin'd what idea we have of that efficacy, which is the subject of the controversy. This is what I find principally wanting in their reasonings, and what I shall here endeavour to supply.

I begin with observing that the terms of *efficacy*, *agency*, *power*, *force*, *energy*, *necessity*, *connexion*, and *productive quality*, are all nearly synonymous; and therefore 'tis an absurdity to employ any of them in defining the rest. By this observation we reject at once all the vulgar definitions, which philosophers have given of power and efficacy; and instead of searching for the idea in these definitions, must look for it in the impressions, from which it is originally deriv'd. If it be a compound idea, it must arise from compound impressions. If simple, from simple impressions.

I believe the most general and most popular explication of this matter, is to say,¹⁸ that finding from experience, that there are several new productions in matter, such as the motions and variations of body, and concluding that there must somewhere be a power capable of producing them, we arrive at last by this reasoning at the idea of power and efficacy. But to be convinc'd that this explication is more popular than philosophical, we need but reflect on two very obvious principles. *First*, That reason alone can never give rise to any original idea, and *secondly*, that reason, as distinguish'd from experience, can never make us conclude, that a cause or productive quality is absolutely requisite to every beginning of existence. Both these considerations have been sufficiently explain'd; and therefore shall not at present be any farther insisted on.

I shall only infer from them, that since reason can never give rise to the idea of efficacy, that idea must be deriv'd from experience, and from some particular instances of this efficacy, which make their passage into the mind by the common channels of sensation or reflection. Ideas always represent their objects or impressions; and *vice versa*, there are some objects necessary to give rise to every idea. If we pretend, therefore, to have any just idea of this efficacy, we must produce some instance, wherein the efficacy is plainly discoverable to the mind, and its operations obvious to our consciousness or sensation. By the refusal of this, we ac-

¹⁸ See Mr. *Locke*; chapter of power.

knowledge, that the idea is impossible and imaginary; since the principle of innate ideas, which alone can save us from this dilemma, has been already refuted, and is now almost universally rejected in the learned world. Our present business, then, must be to find some natural production, where the operation and efficacy of a cause can be clearly conceiv'd and comprehended by the mind, without any danger of obscurity or mistake.

In this research we meet with very little encouragement from that prodigious diversity, which is found in the opinions of those philosophers, who have pretended to explain the secret force and energy of causes.¹⁹ There are some, who maintain, that bodies operate by their substantial form; others, by their accidents or qualities; several, by their matter and form; some, by their form and accidents; others, by certain virtues and faculties distinct from all this. All these sentiments again are mix'd and vary'd in a thousand different ways; and form a strong presumption, that none of them have any solidity or evidence, and that the supposition of an efficacy in any of the known qualities of matter is entirely without foundation. This presumption must encrease upon us, when we consider, that these principles of substantial forms, and accidents, and faculties, are not in reality any of the known properties of bodies, but are perfectly unintelligible and inexplicable. For 'tis evident philosophers wou'd never have had recourse to such obscure and uncertain principles, had they met with any satisfaction in such as are clear and intelligible; especially in such an affair as this, which must be an object of the simplest understanding, if not of the senses. Upon the whole, we may conclude, that 'tis impossible in any one instance to shew the principle, in which the force and agency of a cause is plac'd; and that the most refin'd and most vulgar understandings are equally at a loss in this particular. If any one think proper to refute this assertion, he need not put himself to the trouble of inventing any long reasonings: but may at once shew us an instance of a cause, where we discover the power or operating principle. This defiance we are oblig'd frequently to make use of, as being almost the only means of proving a negative in philosophy.

The small success, which has been met with in all the attempts to fix this power, has at last oblig'd philosophers to conclude, that

¹⁹ See Father *Malebranche*, Book vi. Part 2, chap. 3, and the illustrations upon it.

the ultimate force and efficacy of nature is perfectly unknown to us, and that 'tis in vain we search for it in all the known qualities of matter. In this opinion they are almost unanimous; and 'tis only in the inference they draw from it, that they discover any difference in their sentiments. For some of them, as the *Cartesians* in particular, having establish'd it as a principle, that we are perfectly acquainted with the essence of matter, have very naturally inferr'd, that it is endow'd with no efficacy, and that 'tis impossible for it of itself to communicate motion, or produce any of those effects, which we ascribe to it. As the essence of matter consists in extension, and as extension implies not actual motion, but only mobility; they conclude, that the energy, which produces the motion, cannot lie in the extension.

This conclusion leads them into another, which they regard as perfectly unavoidable. Matter, say they, is in itself entirely unactive, and depriv'd of any power, by which it may produce, or continue, or communicate motion: But since these effects are evident to our senses, and since the power, that produces them, must be plac'd somewhere, it must lie in the DEITY, or that divine being, who contains in his nature all excellency and perfection. 'Tis the deity, therefore, who is the prime mover of the universe, and who not only first created matter, and gave it its original impulse, but likewise by a continu'd exertion of omnipotence, supports its existence, and successively bestows on it all those motions, and configurations, and qualities, with which it is endow'd.

This opinion is certainly very curious, and well worth our attention; but 'twill appear superfluous to examine it in this place, if we reflect a moment on our present purpose in taking notice of it. We have establish'd it as a principle, that as all ideas are deriv'd from impressions, or some precedent *perceptions*, 'tis impossible we can have any idea of power and efficacy, unless some instances can be produc'd, wherein this power *is perceiv'd* to exert itself. Now, as these instances can never be discover'd in body, the *Cartesians*, proceeding upon their principle of innate ideas, have had recourse to a supreme spirit or deity, whom they consider as the only active being in the universe, and as the immediate cause of every alteration in matter. But the principle of innate ideas being allow'd to be false, it follows, that the supposition of a deity can serve us in no stead, in accounting for that idea of agency, which we search

for in vain in all the objects, which are presented to our senses, or which we are internally conscious of in our own minds. For if every idea be deriv'd from an impression, the idea of a deity proceeds from the same origin; and if no impression, either of sensation or reflection, implies any force or efficacy, 'tis equally impossible to discover or even imagine any such active principle in the deity. Since these philosophers, therefore, have concluded, that matter cannot be endow'd with any efficacious principle, because 'tis impossible to discover in it such a principle; the same course of reasoning shou'd determine them to exclude it from the supreme being. Or if they esteem that opinion absurd and impious, as it really is, I shall tell them how they may avoid it; and that is, by concluding from the very first, that they have no adequate idea of power or efficacy in any object; since neither in body or spirit, neither in superior nor inferior natures, are they able to discover one single instance of it.

The same conclusion is unavoidable upon the hypothesis of those, who maintain the efficacy of second causes, and attribute a derivative, but a real power and energy to matter. For as they confess, that this energy lies not in any of the known qualities of matter, the difficulty still remains concerning the origin of its idea. If we have really an idea of power, we may attribute power to an unknown quality: But as 'tis impossible, that that idea can be deriv'd from such a quality, and as there is nothing in known qualities, which can produce it; it follows that we deceive our selves, when we imagine we are possess'd of any idea of this kind, after the manner we commonly understand it. All ideas are deriv'd from, and represent impressions. We never have any impression, that contains any power or efficacy. We never therefore have any idea of power.

Some have asserted, that we feel an energy, or power, in our own mind; and that having in this manner acquir'd the idea of power, we transfer that quality to matter, where we are not able immediately to discover it. The motions of our body, and the thoughts and sentiments of our mind, (say they) obey the will; nor do we seek any farther to acquire a just notion of force or power. But to convince us how fallacious this reasoning is, we, need only consider, that the will being here consider'd as a cause, has no more a discoverable connexion with its effects, than any material

cause has with its proper effect. So far from perceiving the connexion betwixt an act of volition, and a motion of the body; 'tis allow'd that no effect is more inexplicable from the powers and essence of thought and matter. Nor is the empire of the will over our mind more intelligible. The effect is there distinguishable and separable from the cause, and cou'd not be foreseen without the experience of their constant conjunction. We have command over our mind to a certain degree, but beyond *that*, lose all empire over it: And 'tis evidently impossible to fix any precise bounds to our authority, where we consult not experience. In short, the actions of the mind are, in this respect, the same with those of matter. We perceive only their constant conjunction; nor can we ever reason beyond it. No internal impression has an apparent energy, more than external objects have. Since, therefore, matter is confess'd by philosophers to operate by an unknown force, we shou'd in vain hope to attain an idea of force by consulting our own minds.²⁰

It has been establish'd as a certain principle, that general or abstract ideas are nothing but individual ones taken in a certain light, and that, in reflecting on any object, 'tis as impossible to exclude from our thought all particular degrees of quantity and quality as from the real nature of things. If we be possess'd, therefore, of any idea of power in general, we must also be able to conceive some particular species of it; and as power cannot subsist alone, but is always regarded as an attribute of some being or existence, we must be able to place this power in some particular being, and conceive that being as endow'd with a real force and energy, by which such a particular effect necessarily results from its operation. We must distinctly and particularly conceive the connexion betwixt the cause and effect, and be able to pronounce, from a simple view of the one, that it must be follow'd or preceded by the other. This is the true manner of conceiving a particular power in a particular body: and a general idea being impossible without an individual; where the latter is impossible, 'tis

²⁰ The same imperfection attends our ideas of the Deity; but this can have no effect either on religion or morals. The order of the universe proves an omnipotent mind; that is, a mind whose will is *constantly attended* with the obedience of every creature and being. Nothing more is requisite to give a foundation to all the articles of religion, nor is it necessary we shou'd form a distinct idea of the force and energy of the supreme Being. [This paragraph and footnote were added in the Appendix.]

certain the former can never exist. Now nothing is more evident, than that the human mind cannot form such an idea of two objects, as to conceive any connexion betwixt them, or comprehend distinctly that power or efficacy, by which they are united. Such a connexion wou'd amount to a demonstration, and wou'd imply the absolute impossibility for the object not to follow, or to be conceiv'd not to follow upon the other: Which kind of connexion has already been rejected in all cases. If any one is of a contrary opinion, and thinks he has attain'd a notion of power in any particular object, I desire he may point out to me that object. But till I meet with such-a-one, which I despair of, I cannot forbear concluding, that since we can never distinctly conceive how any particular power can possibly reside in any particular object, we deceive ourselves in imagining we can form any such general idea.

Thus upon the whole we may infer, that when we talk of any being, whether of a superior or inferior nature, as endow'd with a power or force, proportion'd to any effect; when we speak of a necessary connexion betwixt objects, and suppose, that this connexion depends upon an efficacy or energy, with which any of these objects are endow'd; in all these expressions, *so apply'd*, we have really no distinct meaning, and make use only of common words, without any clear and determinate ideas. But as 'tis more probable, that these expressions do here lose their true meaning by being *wrong apply'd*, than that they never have any meaning; 'twill be proper to bestow another consideration on this subject, to see if possibly we can discover the nature and origin of those ideas, we annex to them.

Suppose two objects to be presented to us, of which the one is the cause and the other the effect; 'tis plain, that from the simple consideration of one, or both these objects we never shall perceive the tie by which they are united, or be able certainly to pronounce, that there is a connexion betwixt them. 'Tis not, therefore, from any one instance, that we arrive at the idea of cause and effect, of a necessary connexion of power, of force, of energy, and of efficacy. Did we never see any but particular conjunctions of objects, entirely different from each other, we shou'd never be able to form any such ideas.

But again; suppose we observe several instances, in which the same objects are always conjoin'd together, we immediately con-

ceive a connexion betwixt them, and begin to draw an inference from one to another. This multiplicity of resembling instances, therefore, constitutes the very essence of power or connexion, and is the source from which the idea of it arises. In order, then, to understand the idea of power, we must consider that multiplicity; nor do I ask more to give a solution of that difficulty, which has so long perplex'd us. For thus I reason. The repetition of perfectly similar instances can never alone give rise to an original idea, different from what is to be found in any particular instance, as has been observ'd, and as evidently follows from our fundamental principle, *that all ideas are copy'd from impressions*. Since therefore the idea of power is a new original idea, not to be found in any one instance, and which yet arises from the repetition of several instances, it follows, that the repetition *alone* has not that effect, but must either *discover* or *produce* something new, which is the source of that idea. Did the repetition neither discover nor produce anything new, our ideas might be multiply'd by it, but wou'd not be enlarg'd above what they are upon the observation of one single instance. Every enlargement, therefore, (such as the idea of power or connexion) which arises from the multiplicity of similar instances, is copy'd from some effects of the multiplicity, and will be perfectly understood by understanding these effects. Wherever we find anything new to be discover'd or produc'd by the repetition, there we must place the power, and must never look for it in any other object.

But 'tis evident, in the first place, that the repetition of like objects in like relations of succession and contiguity *discovers* nothing new in any one of them; since we can draw no inference from it, nor make it a subject either of our demonstrative or probable reasonings;²¹ as has been already prov'd. Nay suppose we cou'd draw an inference, 'twou'd be of no consequence in the present case; since no kind of reasoning can give rise to a new idea, such as this of power is; but wherever we reason, we must antecedently be possess'd of clear ideas, which may be the objects of our reasoning. The conception always precedes the understanding; and where the one is obscure, the other is uncertain; where the one fails, the other must fail also.

²¹ Sec. 6.

Secondly, 'Tis certain that this repetition of similar objects in similar situations *produces* nothing new either in these objects, or in any external body. For 'twill readily be allow'd, that the several instances we have of the conjunction of resembling causes and effects are in themselves entirely independent, and that the communication of motion, which I see result at present from the shock of two billiardballs, is totally distinct from that which I saw result from such an impulse a twelve-month ago. These impulses have no influence on each other. They are entirely divided by time and place; and the one might have existed and communicated motion, tho' the other never had been in being.

There is, then, nothing new either discover'd or produc'd in any objects by their constant conjunction, and by the uninterrupted resemblance of their relations of succession and contiguity. But 'tis from this resemblance, that the ideas of necessity, of power, and of efficacy, are deriv'd. These ideas, therefore, represent not anything, that does or can belong to the objects, which are constantly conjoin'd. This is an argument, which, in every view we can examine it, will be found perfectly unanswerable. Similar instances are still the first source of our idea of power or necessity; at the same time that they have no influence by their similarity either on each other, or on any external object. We must, therefore, turn ourselves to some other quarter to seek the origin of that idea.

Tho' the several resembling instances, which give rise to the idea of power, have no influence on each other, and can never produce any new quality *in the object*, which can be the model of that idea, yet the *observation* of this resemblance produces a new impression *in the mind*, which is its real model. For after we have observ'd the resemblance in a sufficient number of instances, we immediately feel a determination of the mind to pass from one object to its usual attendant, and to conceive it in a stronger light upon account of that relation. This determination is the only effect of the resemblance; and therefore must be the same with power or efficacy, whose idea is deriv'd from the resemblance. The several instances of resembling conjunctions lead us into the notion of power and necessity. These instances are in themselves totally distinct from each other, and have no union but in the mind, which observes them, and collects their ideas. Necessity, then, is the ef-

fect of this observation, and is nothing but an internal impression of the mind, or a determination to carry our thoughts from one object to another. Without considering it in this view, we can never arrive at the most distant notion of it, or be able to attribute it either to external or internal objects, to spirit or body, to causes or effects.

The necessary connexion betwixt causes and effects is the foundation of our inference from one to the other. The foundation of our inference is the transition arising from the accustom'd union. These are, therefore, the same.

The idea of necessity arises from some impression. There is no impression convey'd by our senses, which can give rise to that idea. It must, therefore, be deriv'd from some internal impression, or impression of reflection. There is no internal impression, which has any relation to the present business, but that propensity, which custom produces, to pass from an object to the idea of its usual attendant. This therefore is the essence of necessity. Upon the whole, necessity is something, that exists in the mind, not in objects; nor is it possible for us ever to form the most distant idea of it, consider'd as a quality in bodies. Either we have no idea of necessity, or necessity is nothing but that determination of the thought to pass from causes to effects, and from effects to causes, according to their experienc'd union.

Thus as the necessity, which makes two times two equal to four, or three angles of a triangle equal to two right ones, lies only in the act of the understanding, by which we consider and compare these ideas; in like manner the necessity or power, which unites causes and effects, lies in the determination of the mind to pass from the one to the other. The efficacy or energy of causes is neither plac'd in the causes themselves, nor in the deity, nor in the concurrence of these two principles; but belongs entirely to the soul, which considers the union of two or more objects in all past instances. 'Tis here that the real power of causes is plac'd along with their connexion and necessity.

I am sensible, that of all the paradoxes, which I have had, or shall hereafter have occasion to advance in the course of this treatise, the present one is the most violent, and that 'tis merely by dint of solid proof and reasoning I can ever hope it will have admission, and overcome the inveterate prejudices of mankind.

Before we are reconcil'd to this doctrine, how often must we repeat to ourselves, *that* the simple view of any two objects or actions, however related, can never give us any idea of power, or of a connexion betwixt them: *that* this idea arises from the repetition of their union: *that* the repetition neither discovers nor causes any thing in the objects, but has an influence only on the mind, by that customary transition it produces: *that* this customary transition is, therefore, the same with the power and necessity; which are consequently qualities of perceptions, not of objects, and are internally felt by the soul and not perceiv'd externally in bodies? There is commonly an astonishment attending every thing extraordinary; and this astonishment changes immediately into the highest degree of esteem or contempt, according as we approve or disapprove of the subject. I am much afraid, that tho' the foregoing reasoning appears to me the shortest and most decisive imaginable; yet with the generality of readers the bias of the mind will prevail, and give them a prejudice against the present doctrine.

This contrary bias is easily accounted for. 'Tis a common observation, that the mind has a great propensity to spread itself on external objects, and to conjoin with them any internal impressions, which they occasion, and which always make their appearance at the same time that these objects discover themselves to the senses. Thus as certain sounds and smells are always found to attend certain visible objects, we naturally imagine a conjunction, even in place, betwixt the objects and qualities, tho' the qualities be of such a nature as to admit of no such conjunction, and really exist no where. But of this more fully hereafter. Mean while 'tis sufficient to observe, that the same propensity is the reason, why we suppose necessity and power to lie in the objects we consider, not in our mind, that considers them; notwithstanding it is not possible for us to form the most distant idea of that quality, when it is not taken for the determination of the mind, to pass from the idea of an object to that of its usual attendant.

But tho' this be the only reasonable account we can give of necessity, the contrary notion is so riveted in the mind from the principles above-mention'd, that I doubt not but my sentiments will be treated by many as extravagant and ridiculous. What! the efficacy of causes lie in the determination of the mind! As if causes did not operate entirely independent of the mind, and wou'd not

continue their operation, even tho' there was no mind existent to contemplate them, or reason concerning them. Thought may well depend on causes for its operation, but not causes on thought. This is to reverse the order of nature, and make that secondary, which is really primary. To every operation there is a power proportion'd; and this power must be plac'd on the body, that operates. If we remove the power from one cause, we must ascribe it to another: But to remove it from all causes, and bestow it on a being, that is no ways related to the cause or effect, but by perceiving them, is a gross absurdity, and contrary to the most certain principles of human reason.

I can only reply to all these arguments, that the case is here much the same, as if a blind man shou'd pretend to find a great many absurdities in the supposition, that the colour of scarlet is not the same with the sound of a trumpet, nor light the same with solidity. If we have really no idea of a power or efficacy in any object, or of any real connexion betwixt causes and effects, 'twill be to little purpose to prove, that an efficacy is necessary in all operations. We do not understand our own meaning in talking so, but ignorantly confound ideas, which are entirely distinct from each other. I am, indeed, ready to allow, that there may be several qualities both in material and immaterial objects, with which we are utterly unacquainted; and if we please to call these *power* or *efficacy*, 'twill be of little consequence to the world. But when, instead of meaning these unknown qualities, we make the terms of power and efficacy signify something, of which we have a clear idea, and which is incompatible with those objects, to which we apply it, obscurity and error begin then to take place, and we are led astray by a false philosophy. This is the case, when we transfer the determination of the thought to external objects, and suppose any real intelligible connexion betwixt them; that being a quality, which can only belong to the mind that considers them.

As to what may be said, that the operations of nature are independent of our thought and reasoning I allow it; and accordingly have observ'd, that objects bear to each other the relations of contiguity and succession; that like objects may be observ'd in several instances to have like relations; and that all this is independent of, and antecedent to the operations of the understanding. But if we go any farther, and ascribe a power or necessary connexion

to these objects; this is what we can never observe in them, but must draw the idea of it from what we feel internally in contemplating them. And this I carry so far, that I am ready to convert my present reasoning into an instance of it, by a subtilty, which it will not be difficult to comprehend.

When any object is presented to us, it immediately conveys to the mind a lively idea of that object, which is usually found to attend it; and this determination of the mind forms the necessary connexion of these objects. But when we change the point of view, from the objects to the perceptions; in that case the impression is to be considered as the cause, and the lively idea as the effect; and their necessary connexion is that new determination, which we feel to pass from the idea of the one to that of the other. The uniting principle among our internal perceptions is as unintelligible as that among external objects, and is not known to us any other way than by experience. Now the nature and effects of experience have been already sufficiently examin'd and explain'd. It never gives us any insight into the internal structure or operating principle of objects, but only accustoms the mind to pass from one to another.

'Tis now time to collect all the different parts of this reasoning, and by joining them together form an exact definition of the relation of cause and effect, which makes the subject of the present enquiry. This order wou'd not have been excusable, of first examining our inference from the relation before we had explain'd the relation itself, had it been possible to proceed in a different method. But as the nature of the relation depends so much on that of the inference, we have been oblig'd to advance in this seemingly preposterous manner, and make use of terms before we were able exactly to define them, or fix their meaning. We shall now correct this fault by giving a precise definition of cause and effect.

There may two definitions be given of this relation, which are only different, by their presenting a different view of the same object, and making us consider it either as a *philosophical* or as a *natural* relation; either as a comparison of two ideas, or as an association betwixt them. We may define a CAUSE to be "An object precedent and contiguous to another, and where all the objects resembling the former are plac'd in like relations of precedency and contiguity to those objects that resemble the latter." If this defini-

tion be esteem'd defective, because drawn from objects foreign to the cause, we may substitute this other definition in its place, *viz.* "A CAUSE is an object precedent and contiguous to another, and so united with it, that the idea of the one determines the mind to form the idea of the other, and the impression of the one to form a more lively idea of the other." Shou'd this definition also be rejected for the same reason, I know no other remedy, than that the persons, who express this delicacy, shou'd substitute a juster definition in its place. But for my part I must own my incapacity for such an undertaking. When I examine with the utmost accuracy those objects, which are commonly denominated causes and effects, I find, in considering a single instance, that the one object is precedent and contiguous to the other; and in enlarging my view to consider several instances, I find only, that like objects are constantly plac'd in like relations of succession and contiguity. Again, when I consider the influence of this constant conjunction, I perceive that such a relation can never be an object of reasoning, and can never operate upon the mind, but by means of custom, which determines the imagination to make a transition from the idea of one object to that of its usual attendant, and from the impression of one to a more lively idea of the other. However extraordinary these sentiments may appear, I think it fruitless to trouble myself with any farther enquiry or reasoning upon the subject, but shall repose myself on them as on establish'd maxims.

'Twill only be proper, before we leave this subject, to draw some corollaries from it, by which we may remove several prejudices and popular errors, that have very much prevail'd in philosophy. First, We may learn from the foregoing doctrine, that all causes are of the same kind, and that in particular there is no foundation for that distinction, which we sometimes make betwixt efficient causes and causes *sine qua non*; or betwixt efficient causes, and formal, and material, and exemplary, and final causes. For as our idea of efficiency is deriv'd from the constant conjunction of two objects, wherever this is observ'd, the cause is efficient; and where it is not, there can never be a cause of any kind. For the same reason we must reject the distinction betwixt *cause* and *occasion*, when suppos'd to signify any thing essentially different from each other. If constant conjunction be imply'd in what we call occa-

sion, 'tis a real cause. If not, 'tis no relation at all, and cannot give rise to any argument or reasoning.

Secondly, The same course of reasoning will make us conclude, that there is but one kind of *necessity*, as there is but one kind of cause, and that the common distinction betwixt *moral* and *physical* necessity is without any foundation in nature. This clearly appears from the precedent explication of necessity. 'Tis the constant conjunction of objects, along with the determination of the mind, which constitutes a physical necessity: And the removal of these is the same thing with *chance*. As objects must either be conjoin'd or not, and as the mind must either be determin'd or not to pass from one object to another, 'tis impossible to admit of any medium betwixt chance and an absolute necessity. In weakening this conjunction and determination you do not change the nature of the necessity; since even in the operation of bodies, these have different degrees of constancy and force, without producing a different species of that relation.

The distinction, which we often make betwixt *power* and the *exercise* of it, is equally without foundation.

Thirdly, We may now be able fully to overcome all that repugnance, which 'tis so natural for us to entertain against the foregoing reasoning, by which we endeavour'd to prove, that the necessity of a cause to every beginning of existence is not founded on any arguments either demonstrative or intuitive. Such an opinion will not appear strange after the foregoing definitions. If we define a cause to be *an object precedent and contiguous to another, and where all the objects resembling the former are plac'd in a like relation of priority and contiguity to those objects, that resemble the latter*; we may easily conceive, that there is no absolute nor metaphysical necessity, that every beginning of existence shou'd be attended with such an object. If we define a cause to be, *An object precedent and contiguous to another, and so united with it in the imagination, that the idea of the one determines the mind to form the idea of the other, and the impression of the one to form a more lively idea of the other*; we shall make still less difficulty of assenting to this opinion. Such an influence on the mind is in itself perfectly extraordinary and incomprehensible; nor can we be certain of its reality, but from experience and observation.

I shall add as a fourth corollary that we can never have reason

to believe that any object exists, of which we cannot form an idea. For as all our reasonings concerning existence are deriv'd from causation, and as all our reasonings concerning causation are deriv'd from the experienc'd conjunction of objects, not from any reasoning or reflection, the same experience must give us a notion of these objects, and must remove all mystery from our conclusions. This is so evident, that 'twou'd scarce have merited our attention, were it not to obviate certain objections of this kind, which might arise against the following reasonings concerning *matter* and *substance*. I need not observe, that a full knowledge of the object is not requisite, but only of those qualities of it which we believe to exist. . . .

SEC. XV. *Rules by Which To Judge of Causes and Effects*

According to the precedent doctrine, there are no objects, which by the mere survey, without consulting experience, we can determine to be the causes of any other; and no objects, which we can certainly determine in the same manner not to be the causes. Any thing may produce any thing. Creation, annihilation, motion, reason, volition; all these may arise from one another, or from any other object we can imagine. Nor will this appear strange, if we compare two principles explain'd above, *that the constant conjunction of objects determines their causation*, and *that, properly speaking, no objects are contrary to each other but existence and non-existence*. Where objects are not contrary, nothing hinders them from having that constant conjunction, on which the relation of cause and effect totally depends.

Since therefore 'tis possible for all objects to become causes or effects to each other, it may be proper to fix some general rules, by which we may know when they really are so.

1. The cause and effect must be contiguous in space and time.
2. The cause must be prior to the effect.
3. There must be a constant union betwixt the cause and effect. 'Tis chiefly this quality, that constitutes the relation.
4. The same cause always produces the same effect, and the same effect never arises but from the same cause. This principle we derive from experience, and is the source of most of our philosophical reasonings. For when by any clear experiment we have dis-

cover'd the causes or effects of any phaenomenon, we immediately extend our observation to every phaenomenon of the same kind, without waiting for that constant repetition, from which the first idea of this relation is deriv'd.

5. There is another principle, which hangs upon this, *viz.* that where several different objects produce the same effect, it must be by means of some quality, which we discover to be common amongst them. For as like effects imply like causes, we must always ascribe the causation to the circumstance, wherein we discover the resemblance.

6. The following principle is founded on the same reason. The difference in the effects of two resembling objects must proceed from that particular, in which they differ. For as like causes always produce like effects, when in any instance we find our expectation to be disappointed, we must conclude that this irregularity proceeds from some difference in the causes.

7. When any object encreases or diminishes with the encrease or diminution of its cause, 'tis to be regarded as a compounded effect, deriv'd from the union of the several different effects, which arise from the several different parts of the cause. The absence or presence of one part of the cause is here suppos'd to be always attended with the absence or presence of a proportionable part of the effect. This constant conjunction sufficiently proves, that the one part is the cause of the other. We must, however, beware not to draw such a conclusion from a few experiments. A certain degree of heat gives pleasure; if you diminish that heat, the pleasure diminishes; but it does not follow, that if you augment it beyond a certain degree, the pleasure will likewise augment; for we find that it degenerates into pain.

8. The eighth and last rule I shall take notice of is, that an object, which exists for any time in its full perfection without any effect, is not the sole cause of that effect, but requires to be assisted by some other principle, which may forward its influence and operation. For as like effects necessarily follow from like causes, and in a contiguous time and place, their separation for a moment shews, that these causes are not compleat ones.

Here is all the LOGIC I think proper to employ in my reasonings; and perhaps even this was not very necessary, but might have been supply'd by the natural principles of our understanding. Our

scholastic headpieces and logicians shew no such superiority above the mere vulgar in their reason and ability, as to give any inclination to imitate them in delivering a long system of rules and precepts to direct our judgment, in philosophy. All the rules of this nature are very easy in their invention, but extremely difficult in their application; and even experimental philosophy, which seems the most natural and simple of any, requires the utmost stretch of human judgment. There is no phaenomenon in nature, but what is compounded and modify'd by so many different circumstances, that in order to arrive at the decisive point, we must carefully separate whatever is superfluous, and enquire by new experiments, if every particular circumstance of the first experiment was essential to it. These new experiments are liable to a discussion of the same kind; so that the utmost constance is requir'd to make us persevere in our enquiry, and the utmost sagacity to choose the right way among so many that present themselves. If this be the case even in natural philosophy, how much more in moral, where there is a much greater complication of circumstances, and where those views and sentiments, which are essential to any action of the mind, are so implicit and obscure, that they often escape our strictest attention, and are not only unaccountable in their causes, but even unknown in their existence? I am much afraid, lest the small success I meet with in my enquiries will make this observation bear the air of an apology rather than of boasting.

If any thing can give me security in this particular, 'twill be the enlarging the sphere of my experiments as much as possible; for which reason it may be proper in this place to examine the reasoning faculty of brutes, as well as that of human creatures.

SEC. XVI. *Of the Reason of Animals*

Next to the ridicule of denying an evident truth, is that of taking much pains to defend it; and no truth appears to me more evident, than that beasts are endow'd with thought and reason, as well as men. The arguments are in this case so obvious, that they never escape the most stupid and ignorant.

We are conscious, that we ourselves, in adapting means to ends, are guided by reason and design, and that 'tis not ignorantly nor casually we perform those actions, which tend to self-preservation,

to the obtaining pleasure, and avoiding pain. When therefore we see other creatures, in millions of instances, perform like actions, and direct them to like ends, all our principles of reason and probability carry us with an invincible force to believe the existence of a like cause. 'Tis needless in my opinion to illustrate this argument by the enumeration of particulars. The smallest attention will supply us with more than are requisite. The resemblance betwixt the actions of animals and those of men is so entire in this respect, that the very first action of the first animal we shall please to pitch on, will afford us an incontestable argument for the present doctrine.

This doctrine is as useful as it is obvious, and furnishes us with a kind of touchstone, by which we may try every system in this species of philosophy. 'Tis from the resemblance of the external actions of animals to those we ourselves perform, that we judge their internal likewise to resemble ours; and the same principle of reasoning, carry'd one step farther, will make us conclude that since our internal actions resemble each other, the causes, from which they are deriv'd, must also be resembling. When any hypothesis, therefore, is advanc'd to explain a mental operation, which is common to men and beasts, we must apply the same hypothesis to both; and as every true hypothesis will abide this trial, so I may venture to affirm, that no false one will ever be able to endure it. The common defect of those systems, which philosophers have employ'd to account for the actions of the mind, is, that they suppose such a subtilty and refinement of thought, as not only exceeds the capacity of mere animals, but even of children and the common people in our own species; who are notwithstanding susceptible of the same emotions and affections as persons of the most accomplish'd genius and understanding. Such a subtilty is a clear proof of the falsehood, as the contrary simplicity of the truth, of any system.

Let us therefore put our present system concerning the nature of the understanding to this decisive trial, and see whether it will equally account for the reasonings of beasts as for these of the human species.

Here we must make a distinction betwixt those actions of animals, which are of a vulgar nature, and seem to be on a level with their common capacities, and those more extraordinary in-

stances of sagacity, which they sometimes discover for their own preservation, and the propagation of their species. A dog, that avoids fire and precipices, that shuns strangers, and caresses his master, affords us an instance of the first kind. A bird, that chooses with such care and nicety the place and materials of her nest, and sits upon her eggs for a due time, and in a suitable season, with all the precaution, that a chymist is capable of in the most delicate projection, furnishes us with a lively instance of the second.

As to the former actions, I assert they proceed from a reasoning, that is not in itself different, nor founded on different principles, from that which appears in human nature. 'Tis necessary in the first place, that there be some impression immediately present to their memory or senses, in order to be the foundation of their judgment. From the tone of voice the dog infers his master's anger, and foresees his own punishment. From a certain sensation affecting his smell, he judges his game not to be far distant from him.

Secondly, the inference he draws from the present impression is built on experience, and on his observation of the conjunction of objects in past instances. As you vary this experience, he varies his reasoning. Make a beating follow upon one sign or motion for some time, and afterwards upon another; and he will successively draw different conclusions, according to his most recent experience.

Now let any philosopher make a trial, and endeavour to explain, that act of the mind, which we call *belief*, and give an account of the principles, from which it is deriv'd, independent of the influence of custom on the imagination, and let his hypothesis be equally applicable to beasts as to the human species; and after he has done this, I promise to embrace his opinion. But at the same time I demand as an equable condition, that if my system be the only one, which can answer to all these terms, it may be receiv'd as entirely satisfactory and convincing. And that 'tis the only one, is evident almost without any reasoning. Beasts certainly never perceive any real connexion among objects. 'Tis therefore by experience they infer one from another. They can never by any arguments form a general conclusion, that those objects, of which they have had no experience resemble those of which they have. 'Tis therefore by means of custom alone, that experience operates upon them. All this was sufficiently evident with respect to man. But

with respect to beasts there cannot be the least suspicion of mistake; which must be own'd to be a strong confirmation, or rather an invincible proof of my system.

Nothing shews more the force of habit in reconciling us to any phaenomenon, than this, that men are not astonish'd at the operations of their own reason, at the same time, that they admire the *instinct* of animals, and find a difficulty in explaining it, merely because it cannot be reduc'd to the very same principles. To consider the matter aright, reason is nothing but a wonderful and unintelligible instinct in our souls, which carries us along a certain train of ideas, and endows them with particular qualities, according to their particular situations and relations. This instinct, 'tis true, arises from past observation and experience; but can any one give the ultimate reason, why past experience and observation produces such an effect, any more than why nature alone shou'd produce it? Nature may certainly produce whatever can arise from habit: Nay, habit is nothing but one of the principles of nature, and derives all its force from that origin.

PART IV. OF THE SCEPTICAL AND OTHER SYSTEMS OF PHILOSOPHY

SEC. I. *Of Scepticism with Regard to Reason*

In all demonstrative sciences the rules are certain and infallible; but when we apply them, our fallible and uncertain faculties are very apt to depart from them, and fall into error. We must, therefore, in every reasoning form a new judgment, as a check or controul on our first judgment or belief; and must enlarge our view to comprehend a kind of history of all the instances, wherein our understanding has deceiv'd us, compar'd with those, wherein its testimony was just and true. Our reason must be consider'd as a kind of cause, of which truth is the natural effect; but such-a-one as by the irruption of other causes, and by the inconstancy of our mental powers, may frequently be prevented. By this means all knowledge degenerates into probability; and this probability is greater or less, according to our experience of the veracity or deceitfulness of our understanding, and according to the simplicity or intricacy of the question.

There is no Algebraist nor Mathematician so expert in his science, as to place entire confidence in any truth immediately upon his discovery of it, or regard it as any thing, but a mere probability. Every time he runs over his proofs, his confidence encreases; but still more by the approbation of his friends; and is rais'd to its utmost perfection by the universal assent and applauses of the learned world. Now 'tis evident, that this gradual encrease of assurance is nothing but the addition of new probabilities, and is deriv'd from the constant union of causes and effects, according to past experience and observation.

In accompts of any length or importance, Merchants seldom trust to the infallible certainty of numbers for their security; but by the artificial structure of the accompts, produce a probability beyond what is deriv'd from the skill and experience of the accomptant. For that is plainly of itself some degree of probability; tho' uncertain and variable, according to the degrees of his experience and length of the accompt. Now as none will maintain, that our assurance in a long numeration exceeds probability, I may safely affirm, that there scarce is any proposition concerning numbers, of which we can have a fuller security. For 'tis easily possible, by gradually diminishing the numbers, to reduce the longest series of addition to the most simple question, which can be form'd, to an addition of two single numbers; and upon this supposition we shall find it impracticable to shew the precise limits of knowledge and of probability, or discover that particular number, at which the one ends and the other begins. But knowledge and probability are of such contrary and disagreeing natures, that they cannot well run insensibly into each other, and that because they will not divide, but must be either entirely present, or entirely absent. Besides, if any single addition were certain, every one wou'd be so, and consequently the whole or total sum; unless the whole can be different from all its parts. I had almost said, that this was certain; but I reflect that it must reduce *itself*, as well as every other reasoning, and from knowledge degenerate into probability.

Since therefore all knowledge resolves itself into probability, and becomes at last of the same nature with that evidence, which we employ in common life, we must now examine this latter species of reasoning, and see on what foundation it stands.

In every judgment, which we can form concerning probability, as well as concerning knowledge, we ought always to correct the first judgment, deriv'd from the nature of the object, by another judgment, deriv'd from the nature of the understanding. 'Tis certain a man of solid sense and long experience ought to have, and usually has, a greater assurance in his opinions, than one that is foolish and ignorant, and that our sentiments have different degrees of authority, even with ourselves, in proportion to the degrees of our reason and experience. In the man of the best sense and longest experience, this authority is never entire; since even such-a-one must be conscious of many errors in the past, and must still dread the like for the future. Here then arises a new species of probability to correct and regulate the first, and fix its just standard and proportion. As demonstration is subject to the controul of probability, so is probability liable to a new correction by a reflex act of the mind, wherein the nature of our understanding, and our reasoning from the first probability become our objects.

Having thus found in every probability, beside the original uncertainty inherent in the subject, a new uncertainty deriv'd from the weakness of that faculty, which judges, and having adjusted these two together, we are oblig'd by our reason to add a new doubt deriv'd from the possibility of error in the estimation we make of the truth and fidelity of our faculties. This is a doubt, which immediately occurs to us, and of which, if we wou'd closely pursue our reason, we cannot avoid giving a decision. But this decision, tho' it shou'd be favourable to our preceding judgment, being founded only on probability, must weaken still further our first evidence, and must itself be weaken'd by a fourth doubt of the same kind, and so on *in infinitum*; till at last there remain nothing of the original probability, however great we may suppose it to have been, and however small the diminution by every new uncertainty. No finite object can subsist under a decrease repeated *in infinitum*; and even the vastest quantity, which can enter into human imagination, must in this manner be reduc'd to nothing. Let our first belief be never so strong, it must infallibly perish by passing thro' so many new examinations, of which each diminishes somewhat of its force and vigour. When I reflect on the natural fallibility of my judgment, I have less confidence in my opinions, than when I only consider the objects concerning which I reason;

and when I proceed still farther, to turn the scrutiny against every successive estimation I make of my faculties, all the rules of logic require a continual diminution, and at last a total extinction of belief and evidence.

Shou'd it here be ask'd me, whether I sincerely assent to this argument, which I seem to take such pains to inculcate, and whether I be really one of those sceptics, who hold that all is uncertain, and that our judgment is not in *any* thing possest of *any* measures of truth and falshood; I shou'd reply, that this question is entirely superfluous, and that neither I, nor any other person was ever sincerely and constantly of that opinion. Nature, by an absolute and uncontrollable necessity has determin'd us to judge as well as to breathe and feel; nor can we any more forbear viewing certain objects in a stronger and fuller light, upon account of their customary connexion with a present impression, than we can hinder ourselves from thinking as long as we are awake, or seeing the surrounding bodies, when we turn our eyes towards them in broad sunshine. Whoever has taken the pains to refute the cavils of this *total* scepticism, has really disputed without an antagonist, and endeavour'd by arguments to establish a faculty, which nature has antecedently implanted in the mind, and render'd unavoidable.

My intention then in displaying so carefully the arguments of that fantastic sect, is only to make the reader sensible of the truth of my hypothesis, *that all our reasonings concerning causes and effects are deriv'd from nothing but custom; and that belief is more properly an act of the sensitive, than of the cogitative part of our natures.* I have here prov'd, that the very same principles, which make us form a decision upon any subject, and correct that decision by the consideration of our genius and capacity, and of the situation of our mind, when we examin'd that subject; I say, I have prov'd, that these same principles, when carry'd farther, and apply'd to every new reflex judgment, must, by continually diminishing the original evidence, at last reduce it to nothing, and utterly subvert all belief and opinion. If belief, therefore, were a simple act of the thought, without any peculiar manner of conception, or the addition of aforce and vivacity, it must infallibly destroy itself, and in every case terminate in a total suspense of judgment. But as experience will sufficiently convince any one, who thinks it worth while to try, that tho' he can find no error in the foregoing

arguments, yet he still continues to believe, and think, and reason as usual, he may safely conclude, that his reasoning and belief is some sensation or peculiar manner of conception, which 'tis impossible for mere ideas and reflections to destroy. . . .

SEC. II. *Of Scepticism with Regard to the Senses*

Thus the sceptic still continues to reason and believe, even tho' he asserts, that he cannot defend his reason by reason; and by the same rule he must assent to the principle concerning the existence of body, tho' he cannot pretend by any arguments of philosophy to maintain its veracity. Nature has not left this to his choice, and has doubtless esteem'd it an affair of too great importance to be trusted to our uncertain reasonings and speculations. We may well ask, *What causes induce us to believe in the existence of body?* but 'tis in vain to ask, *Whether there be body or not?* That is a point, which we must take for granted in all our reasonings.

The subject, then, of our present enquiry is concerning the *causes* which induce us to believe in the existence of body. . . .

We may begin with observing, that the difficulty in the present case is not concerning the matter of fact, or whether the mind forms such a conclusion concerning the continu'd existence of its perceptions, but only concerning the manner in which the conclusion is form'd, and principles from which it is deriv'd. 'Tis certain, that almost all mankind, and even philosophers themselves, for the greatest part of their lives, take their perceptions to be their only objects, and suppose, that the very being, which is intimately present to the mind, is the real body or material existence. 'Tis also certain, that this very perception or object is suppos'd to have a continu'd uninterrupted being, and neither to be annihilated by our absence, nor to be brought into existence by our presence. When we are absent from it, we say it still exists, but that we do not feel, we do not see it. When we are present, we say we feel, or see it. Here then may arise two questions; *First*, How we can satisfy ourselves in supposing a perception to be absent from the mind without being annihilated. *Secondly*, After what manner we conceive an object to become present to the mind, without some new creation of a perception or image; and what we mean by this *seeing*, and *feeling*, and *perceiving*.

As to the first question; we may observe, that what we call a *mind*, is nothing but a heap or collection of different perceptions, united together by certain relations, and suppos'd, tho' falsely, to be endow'd with a perfect simplicity and identity. Now as every perception is distinguishable from another, and may be consider'd as separately existent; it evidently follows, that there is no absurdity in separating any particular perception from the mind; that is, in breaking off all its relations, with that connected mass of perceptions, which constitute a thinking being.

The same reasoning affords us an answer to the second question. If the name of *perception* renders not this separation from a mind absurd and contradictory, the name of *object*, standing for the very same thing, can never render their conjunction impossible. External objects are seen, and felt, and become present to the mind; that is, they acquire such a relation to a connected heap of perceptions, as to influence them very considerably in augmenting their number by present reflections and passions, and in storing the memory with ideas. The same continu'd and uninterrupted Being may, therefore, be sometimes absent from it, without any real or essential change in the Being itself. An interrupted appearance to the senses implies not necessarily an interruption in the existence. The supposition of the continu'd existence of sensible objects or perceptions involves no contradiction. We may easily indulge our inclination to that supposition. When the exact resemblance of our perceptions makes us ascribe to them an identity, we may remove the seeming interruption by feigning a continu'd being, which may fill those intervals, and preserve a perfect and entire identity to our perceptions.

But as we here not only *feign* but *believe* this continu'd existence, the question is, *from whence arises such a belief*; and this question leads us to the *fourth* member of this system. It has been prov'd already, that belief in general consists in nothing, but the vivacity of an idea; and that an idea may acquire this vivacity by its relation to some present impression. Impressions are naturally the most vivid perceptions of the mind; and this quality is in part convey'd by the relation to every connected idea. The relation causes a smooth passage from the impression to the idea, and even gives a propensity to that passage. The mind falls so easily from the one perception to the other, that it scarce perceives the change,

but retains in the second a considerable share of the vivacity of the first. It is excited by the lively impression; and this vivacity is convey'd to the related idea, without any great diminution in the passage, by reason of the smooth transition and the propensity of the imagination.

But suppose, that this propensity arises from some other principle, besides that of relation; 'tis evident it must still have the same effect, and convey the vivacity from the impression to the idea. Now this is exactly the present case. Our memory presents us with a vast number of instances of perceptions perfectly resembling each other, that return at different distances of time, and after considerable interruptions. This resemblance gives us a propensity to consider these interrupted perceptions as the same; and also a propensity to connect them by a continu'd existence, in order to justify this identity, and avoid the contradiction, in which the interrupted appearance of these perceptions seems necessarily to involve us. Here then we have a propensity to feign the continu'd existence of all sensible objects; and as this propensity arises from some lively impressions of the memory, it bestows a vivacity on that fiction; or in other words, makes us believe the continu'd existence of body. If sometimes we ascribe a continu'd existence to objects, which are perfectly new to us, and of whose constancy and coherence we have no experience, 'tis because the manner, in which they present themselves to our senses, resemble that of constant and coherent objects; and this resemblance is a source of reasoning and analogy, and leads us to attribute the same qualities to similar objects.

I believe an intelligent reader will find less difficulty to assent to this system, than to comprehend it fully and distinctly, and will allow, after a little reflection, that every part carries its own proof along with it. 'Tis indeed evident, that as the vulgar *suppose* their perceptions to be their only objects, and at the same time *believe* the continu'd existence of matter, we must account for the origin of the belief upon that supposition. Now upon that supposition, 'tis a false opinion that any of our objects, or perceptions, are identically the same after an interruption; and consequently the opinion of their identity can never arise from reason, but must arise from the imagination. The imagination is seduc'd into such an opinion only by means of the resemblance of certain percep-

tions; since we find they are only our resembling perceptions, which we have a propensity to suppose the same. This propensity to bestow an identity on our resembling perceptions, produces the fiction of a continu'd existence; since that fiction, as well as the identity, is really false, as is acknowledg'd by all philosophers, and has no other effect than to remedy the interruption of our perceptions, which is the only circumstance that is contrary to their identity. In the last place this propensity causes belief by means of the present impressions of the memory; since without the remembrance of former sensations, 'tis plain we never shou'd have any belief of the continu'd existence of body. Thus in examining all these parts, we find that each of them together form a consistent system, which is perfectly convincing. A strong propensity or inclination alone, without any present impression, will sometimes cause a belief or opinion. How much more when aided by that circumstance?

But tho' we are led after this manner, by the natural propensity of the imagination, to ascribe a continu'd existence to those sensible objects or perceptions, which we find to resemble each other in their interrupted appearance; yet a very little reflection and philosophy is sufficient to make us perceive the fallacy of that opinion. I have already observ'd, that there is an intimate connexion betwixt those two principles, of a *continu'd* and of a *distinct* or *independent* existence, and that we no sooner establish the one than the other follows, as a necessary consequence. 'Tis the opinion of a continu'd existence, which first takes place, and without much study or reflection draws the other along with it, wherever the mind follows its first and most natural tendency. But when we compare experiments, and reason a little upon them, we quickly perceive, that the doctrine of the independent existence of our sensible perceptions is contrary to the plainest experience. This leads us backward upon our footsteps to perceive our error in attributing a continu'd existence to our perceptions, and is the origin of many very curious opinions which we shall here endeavour to account for.

'Twill first be proper to observe a few of those experiments, which convince us, that our perceptions are not possess'd of any independent existence. When we press one eye with a finger, we immediately perceive all the objects to become double, and one half

of them to be remov'd from their common and natural position. But as we do not attribute a continu'd existence to both these perceptions, and as they are both of the same nature, we clearly perceive, that all our perceptions are dependent on our organs, and the disposition of our nerves and animal spirits. This opinion is confirm'd by the seeming encrease and diminution of objects, according to their distance; by the apparent alterations in their figure; by the changes in their colour and other qualities from our sickness and distempers; and by an infinite number of other experiments of the same kind; from all which we learn, that our sensible perceptions are not possest of any distinct or independent existence.

The natural consequence of this reasoning shou'd be, that our perceptions have no more a continu'd than an independent existence; and indeed philosophers have so far run into this opinion, that they change their system, and distinguish, (as we shall do for the future) betwixt perceptions and objects, of which the former are suppos'd to be interrupted, and perishing, and different at every different return; the latter to be uninterrupted, and to preserve a continu'd existence and identity. But however philosophical this new system may be esteem'd, I assert that 'tis only a palliative remedy, and that it contains all the difficulties of the vulgar system, with some others, that are peculiar to itself. There are no principles either of the understanding or fancy, which lead us directly to embrace this opinion of the double existence of perceptions and objects, nor can we arrive at it but by passing thro' the common hypothesis of the identity and continuance of our interrupted perceptions. Were we not first perswaded, that our perceptions are our only objects, and continue to exist even when they no longer make their appearance to the senses, we shou'd never be led to think, that our perceptions and objects are different, and that our objects alone preserve a continu'd existence. "The latter hypothesis has no primary recommendation either to reason or the imagination, but acquires all its influence on the imagination from the former." This proposition contains two parts, which we shall endeavour to prove as distinctly and clearly, as such abstruse subjects will permit.

As to the first part of the proposition, *that this philosophical hypothesis has no primary recommendation, either to reason or the imagination*, we may soon satisfy ourselves with regard to *reason*

by the following reflections. The only existences, of which we are certain, are perceptions, which being immediately present to us by consciousness, command our strongest assent, and are the first foundation of all our conclusions. The only conclusion we can draw from the existence of one thing to that of another, is by means of the relation of cause and effect, which shews, that there is a connexion betwixt them, and that the existence of one is dependent on that of the other. The idea of this relation is deriv'd from past experience, by which we find, that two beings are constantly conjoin'd together, and are always present at once to the mind. But as no beings are ever present to the mind but perceptions; it follows that we may observe a conjunction or a relation of cause and effect between different perceptions, but can never observe it between perceptions and objects. 'Tis impossible, therefore, that from the existence or any of the qualities of the former, we can ever form any conclusion concerning the existence of the latter, or ever satisfy our reason in this particular.

'Tis no less certain, that this philosophical system has no primary recommendation to the *imagination*, and that that faculty wou'd never, of itself, and by its original tendency, have fallen upon such a principle. I confess it will be somewhat difficult to prove this to the full satisfaction of the reader; because it implies a negative, which in many cases will not admit of any positive proof. If any one wou'd take the pains to examine this question, and wou'd invent a system, to account for the direct origin of this opinion from the imagination, we shou'd be able, by the examination of that system, to pronounce a certain judgment in the present subject. Let it be taken for granted, that our perceptions are broken, and interrupted, and however like, are still different from each other; and let any one upon this supposition shew why the fancy, directly and immediately, proceeds to the belief of another existence, resembling these perceptions in their nature, but yet continu'd, and uninterrupted, and identical; and after he has done this to my satisfaction, I promise to renounce my present opinion. Mean while I cannot forbear concluding, from the very abstractedness and difficulty of the first supposition, that 'tis an improper subject for the fancy to work upon. Who ever wou'd explain the origin of the *common* opinion concerning the continu'd and distinct existence of body, must take the mind in its *common* situation, and

must proceed upon the supposition, that our perceptions are our only objects, and continue to exist even when they are not perceiv'd. Tho' this opinion be false, 'tis the most natural of any, and has alone any primary recommendation to the fancy.

As to the second part of the proposition, *that the philosophical system acquires all its influence on the imagination from the vulgar one*; we may observe, that this is a natural and unavoidable consequence of the foregoing conclusion, *that it has no primary recommendation to reason or the imagination*. For as the philosophical system is found by experience to take hold of many minds, and in particular of all those, who reflect ever so little on this subject, it must derive all its authority from the vulgar system; since it has no original authority of its own. The manner, in which these two systems, tho' directly contrary, are connected together, may be explain'd, as follows.

The imagination naturally runs on in this train of thinking. Our perceptions are our only objects: Resembling perceptions are the same, however broken or uninterrupted in their appearance: This appearing interruption is contrary to the identity: The interruption consequently extends not beyond the appearance, and the perception or object really continues to exist, even when absent from us: Our sensible perceptions have, therefore, a continu'd and uninterrupted existence. But as a little reflection destroys this conclusion, that our perceptions have a continu'd existence, by shewing that they have a dependent one, 'twou'd naturally be expected, that we must altogether reject the opinion, that there is such a thing in nature as a continu'd existence, which is preserv'd even when it no longer appears to the senses. The case, however, is otherwise. Philosophers are so far from rejecting the opinion of a continu'd existence upon rejecting that of the independence and continuance of our sensible perceptions, that tho' all sects agree in the latter sentiment, the former, which is, in a manner, its necessary consequence, has been peculiar to a few extravagant sceptics; who after all maintain'd that opinion in words only, and were never able to being themselves sincerely to believe it.

There is a great difference betwixt such opinions as we form after a calm and profound reflection, and such as we embrace by a kind of instinct or natural impulse, on account of their suitability and conformity to the mind. If these opinions become con-

trary, 'tis not difficult to foresee which of them will have the advantage. As long as our attention is bent upon the subject, the philosophical and study'd principle may prevail; but the moment we relax our thoughts, nature will display herself, and draw us back to our former opinion. Nay she has sometimes such an influence, that she can stop our progress, even in the midst of our most profound reflections, and keep us from running on with all the consequences, of any philosophical opinion. Thus tho' we clearly perceive the dependence and interruption of our perceptions, we stop short in our career, and never upon that account reject the notion of an independent and continu'd existence. That opinion has taken such deep root in the imagination, that 'tis impossible ever to eradicate it, nor will any strain'd metaphysical conviction of the dependence of our perceptions be sufficient for that purpose.

But tho' our natural and obvious principles here prevail above our study'd reflections, 'tis certain there must be some struggle and opposition in the case; at least so long as these reflections retain any force or vivacity. In order to set ourselves at ease in this particular, we contrive a new hypothesis, which seems to comprehend both these principles of reason and imagination. This hypothesis is the philosophical one of the double existence of perceptions and objects; which pleases our reason, in allowing, that our dependent perceptions are interrupted and different; and at the same time is agreeable to the imagination, in attributing a continu'd existence to something else, which we call *objects*. This philosophical system, therefore, is the monstrous offspring of two principles, which are contrary to each other, which are both at once embrac'd by the mind, and which are unable mutually to destroy each other. The imagination tells us, that our resembling perceptions have a continu'd and uninterrupted existence, and are not annihilated by their absence. Reflection tells us, that even our resembling perceptions are interrupted in their existence, and different from each other. The contradiction betwixt these opinions we elude by a new fiction, which is conformable to the hypotheses both of reflection and fancy, by ascribing these contrary qualities to different existences; the *interruption* to perceptions, and the *continuance* to objects. Nature is obstinate, and will not quit the field, however strongly attack'd by reason; and at the same time reason

is so clear in the point, that there is no possibility of disguising her. Not being able to reconcile these two enemies, we endeavour to set ourselves at ease as much as possible, by successively granting to each what it demands, and by feigning a double existence, where each may find something, that has all the conditions it desires. Were we fully convinc'd, that our resembling perceptions are continu'd, and identical, and independent, we shou'd never run into this opinion of a double existence; since we shou'd find satisfaction in our first supposition, and wou'd not look beyond. Again, were we fully convinc'd, that our perceptions are dependent, and interrupted, and different, we shou'd be as little inclin'd to embrace the opinion of a double existence; since in that case we shou'd clearly perceive the error of our first supposition and of a continu'd existence, and wou'd never regard it any farther. 'Tis therefore from the intermediate situation of the mind, that this opinion arises, and from such an adherence to these two contrary principles, as makes us seek some pretext to justify our receiving both; which happily at last is found in the system of a double existence.

Another advantage of this philosophical system is its similarity to the vulgar one; by which means we can humour our reason for a moment, when it becomes troublesome and solicitous; and yet upon its least negligence or inattention, can easily return to our vulgar and natural notions. Accordingly we find, that philosophers neglect not this advantage; but immediately upon leaving their closets, mingle with the rest of mankind in those exploded opinions, that our perceptions are our only objects, and continue identically and uninterruptedly the same in all their interrupted appearances. . . .

SEC. V. *Of the Immateriality of the Soul*

Having found such contradictions and difficulties in every system concerning external objects, and in the idea of matter, which we fancy so clear and determinate, we shall naturally expect still greater difficulties and contradictions in every hypothesis concerning our internal perceptions, and the nature of the mind, which we are apt to imagine so much more obscure, and uncertain. But in this we shou'd deceive ourselves. The intellectual world, tho'

involv'd in infinite obscurities, is not perplex'd with any such contradictions, as those we have discover'd in the natural. What is known concerning it, agrees with itself; and what is unknown, we must be contented to leave so.

'Tis true, wou'd we hearken to certain philosophers, they promise to diminish our ignorance; but I am afraid 'tis at the hazard of running us into contradictions, from which the subject is of itself exempted. These philosophers are the curious reasoners concerning the material or immaterial substances, in which they suppose our perceptions to inhere. In order to put a stop to these endless cavils on both sides, I know no better method, than to ask these philosophers in a few words, *What they mean by substance and inhesion?* And after they have answer'd this question, 'twill then be reasonable, and not till then, to enter seriously into the dispute.

This question we have found impossible to be answer'd with regard to matter and body: But besides that in the case of the mind, it labours under all the same difficulties, 'tis burthen'd with some additional ones, which are peculiar to that subject. As every idea is deriv'd from a precedent impression, had we any idea of the substance of our minds, we must also have an impression of it; which is very difficult, if not impossible, to be conceiv'd. For how can an impression represent a substance, otherwise than by resembling it? And how can an impression resemble a substance, since, according to this philosophy, it is not a substance, and has none of the peculiar qualities or characteristics of a substance?

But leaving the question of *what may or may not be*, for that other *what actually is*, I desire those philosophers, who pretend that we have an idea of the substance of our minds, to point out the impression that produces it, and tell distinctly after what manner that impression operates, and from what object it is deriv'd. Is it an impression of sensation or of reflection? Is it pleasant, or painful, or indifferent? Does it attend us at all times, or does it only return at intervals? If at intervals, at what times principally does it return, and by what causes is it produced?

If instead of answering these questions, any one shou'd evade the difficulty, by saying, that the definition of a substance is *something which may exist by itself*; and that this definition ought to satisfy us: Shou'd this be said, I shou'd observe, that this definition agrees to every thing, that can possibly be conceiv'd; and

never will serve to distinguish substance from accident, or the soul from its perceptions. For thus I reason. Whatever is clearly conceiv'd may exist; and whatever is clearly conceiv'd, after any manner, may exist after the same manner. This is one principle, which has been already acknowledg'd. Again, every thing, which is different, is distinguishable, and every thing which is distinguishable, is separable by the imagination. This is another principle. My conclusion from both is, that since all our perceptions are different from each other, and from every thing else in the universe, they are also distinct and separable, and may be consider'd as separately existent, and may exist separately, and have no need of any thing else to support their existence. They are, therefore, substances, as far as this definition explains a substance.

Thus neither by considering the first origin of ideas, nor by means of a definition are we able to arrive at any satisfactory notion of substance; which seems to me a sufficient reason for abandoning utterly that dispute concerning the materiality and immateriality of the soul, and makes me absolutely condemn even the question itself. We have no perfect idea of any thing but of a perception. A substance is entirely different from a perception. We have, therefore, no idea of a substance. Inhesion in something is suppos'd to be requisite to support the existence of our perceptions. Nothing appears requisite to support the existence of a perception. We have, therefore, no idea of inhesion. What possibility then of answering that question, *Whether perceptions inhere in a material or immaterial substance*, when we do not so much as understand the meaning of the question? . . .

SEC. VI. *Of Personal Identity*

There are some philosophers, who imagine we are every moment intimately conscious of what we call our SELF; that we feel its existence and its continuance in existence; and are certain, beyond the evidence of a demonstration, both of its perfect identity and simplicity. The strongest sensation, the most violent passion, say they, instead of distracting us from this view, only fix it the more intensely and make us consider their influence on *self* either by their pain or pleasure. To attempt a farther proof of this were to weaken its evidence; since no proof can be deriv'd from any

fact, of which we are so intimately conscious; nor is there any thing, of which we can be certain, if we doubt of this.

Unluckily all these positive assertions are contrary to that very experience, which is pleaded for them, nor have we any idea of self, after the manner it is here explain'd. For from what impression cou'd this idea be deriv'd? This question 'tis impossible to answer without a manifest contradiction and absurdity; and yet 'tis a question, which must necessarily be answer'd, if we wou'd have the idea of self pass for clear and intelligible. It must be some one impression, that gives rise to every real idea. But self or person is not any one impression, but that to which our several impressions and ideas are suppos'd to have a reference. If any impression gives rise to the idea of self, that impression must continue invariably the same, thro' the whole course of our lives; since self is suppos'd to exist after that manner. But there is no impression constant and invariable. Pain and pleasure, grief and joy, passions and sensations succeed each other, and never all exist at the same time. It cannot, therefore, be from any of these impressions, or from any other, that the idea of self is deriv'd; and consequently there is no such idea.

But farther, what must become of all our particular perceptions upon this hypothesis? All these are different, and distinguishable, and separable from each other, and may be separately consider'd, and may exist separately, and have no need of any thing to support their existence. After what manner, therefore, do they belong to self; and how are they connected with it? For my part, when I enter most intimately into what I call *myself*, I always stumble on some particular perception or other, of heat or cold, light or shade, love or hatred, pain or pleasure. I never can catch *myself* at any time without a perception, and never can observe any thing but the perception. When my perceptions are remov'd for any time, as by sound sleep; so long am I insensible of *myself*, and may truly be said not to exist. And were all my perceptions remov'd by death, and cou'd I neither think, nor feel, nor see, nor love, nor hate after the dissolution of my body, I shou'd be entirely annihilated, nor do I conceive what is farther requisite to make me a perfect non-entity. If any one, upon serious and unprejudic'd reflection, thinks he has a different notion of *himself*, I must confess I can reason no longer with him. All I can allow him is, that he

may be in the right as well as I, and that we are essentially different in this particular. He may, perhaps, perceive something simple and continu'd, which he calls *himself*; tho' I am certain there is no such principle in me.

But setting aside some metaphysicians of this kind, I may venture to affirm of the rest of mankind, that they are nothing but a bundle or collection of different perceptions, which succeed each other with an inconceivable rapidity, and are in a perpetual flux and movement. Our eyes cannot turn in their sockets without varying our perceptions. Our thought is still more variable than our sight; and all our other senses and faculties contribute to this change; nor is there any single power of the soul, which remains unalterably the same, perhaps for one moment. The mind is a kind of theatre, where several perceptions successively make their appearance; pass, re-pass, glide away, and mingle in an infinite variety of postures and situations. There is properly no *simplicity* in it at one time, nor *identity* in different; whatever natural propension we may have to imagine that simplicity and identity. The comparison of the theatre must not mislead us. They are the successive perceptions only, that constitute the mind; nor have we the most distant notion of the place, where these senses are represented, or of the materials, of which it is compos'd.

What then gives us so great a propension to ascribe an identity to these successive perceptions, and to suppose ourselves possess of an invariable and uninterrupted existence thro' the whole course of our lives? In order to answer this question, we must distinguish betwixt personal identity, as it regards our thought or imagination, and as it regards our passions or the concern we take in ourselves. The first is our present subject; and to explain it perfectly we must take the matter pretty deep, and account for that identity, which we attribute to plants and animals; there being a great analogy betwixt it, and the identity of a self or person.

We have a distinct idea of an object, that remains invariable and uninterrupted thro' a suppos'd variation of time; and this idea we call that of *identity* or *sameness*. We have also a distinct idea of several different objects existing in succession, and connected together by a close relation; and this to an accurate view affords as perfect a notion of *diversity*, as if there was no manner of relation among the objects. But tho' these two ideas of identity,

and a succession of related objects be in themselves perfectly distinct, and even contrary, yet 'tis certain, that in our common way of thinking they are generally confounded with each other. That action of the imagination, by which we consider the uninterrupted and invariable object, and that by which we reflect on the succession of related objects, are almost the same to the feeling, nor is there much more effort of thought requir'd in the latter case than in the former. The relation facilitates the transition of the mind from one object to another, and renders its passage as smooth as if it contemplated one continu'd object. This resemblance is the cause of the confusion and mistake, and makes us substitute the notion of identity, instead of that of related objects. However at one instant we may consider the related succession as variable or interrupted, we are sure the next to ascribe to it a perfect identity, and regard it as invariable and uninterrupted. Our propensity to this mistake is so great from the resemblance above-mention'd, that we fall into it before we are aware; and tho' we incessantly correct ourselves by reflection, and return to a more accurate method of thinking, yet we cannot long sustain our philosophy, or take off this bias from the imagination. Our last resource is to yield to it, and boldly assert that these different related objects are in effect the same, however interrupted and variable. In order to justify to ourselves this absurdity, we often feign some new and unintelligible principle, that connects the objects together, and prevents their interruption or variation. Thus we feign the continu'd existence of the perceptions of our senses, to remove the interruption; and run into the notion of a *soul*, and *self*, and *substance*, to disguise the variation. But we may farther observe, that where we do not give rise to such a fiction, our propension to confound identity with relation is so great, that we are apt to imagine²² something unknown and mysterious, connecting the parts, beside their relation; and this I take to be the case with regard to the identity we ascribe to plants and vegetables. And even when this does not take place, we still feel a propensity to confound these

²² If the reader is desirous to see how a great genius may be influenc'd by these seemingly trivial principles of the imagination, as well as the mere vulgar, let him read my Lord *Shaftsbury's* reasonings concerning the uniting principle of the universe, and the identity of plants and animals. See his *Moralists: or, Philosophical rhapsody*.

ideas, tho' we are not able fully to satisfy ourselves in that particular, nor find any thing invariable and uninterrupted to justify our notion of identity. . . .

SEC. VII. *Conclusion of This Book*

But before I launch out into those immense depths of philosophy, which lie before me, I find myself inclin'd to stop a moment in my present station, and to ponder that voyage, which I have undertaken, and which undoubtedly requires the utmost art and industry to be brought to a happy conclusion. Methinks I am like a man, who having struck on many shoals, and having narrowly escap'd shipwreck in passing a small frith, has yet the temerity to put out to sea in the same leaky weather-beaten vessel, and even carries his ambition so far as to think of compassing the globe under these disadvantageous circumstances. My memory of past errors and perplexities, makes me diffident for the future. The wretched condition, weakness, and disorder of the faculties, I must employ in my enquiries, encrease my apprehensions. And the impossibility of amending or correcting these faculties, reduces me almost to despair, and makes me resolve to perish on the barren rock on which I am at present, rather than venture myself upon that boundless ocean, which runs out into immensity. This sudden view of my danger strikes me with melancholy; and as 'tis usual for that passion, above all others, to indulge itself; I cannot forbear feeding my despair, with all those desponding reflections, which the present subject furnishes me with in such abundance.

I am first affrighted and confounded with that forelorn solitude, in which I am plac'd in my philosophy, and fancy myself some strange uncouth monster, who not being able to mingle and unite in society, has been expell'd all human commerce, and left utterly abandon'd and disconsolate. Fain wou'd I run into the crowd for shelter and warmth; but cannot prevail with myself to mix with such deformity. I call upon others to join me, in order to make a company apart; but no one will hearken to me. Every one keeps at a distance, and dreads that storm, which beats upon me from every side. I have expos'd myself to the enmity of all metaphysicians, logicians, mathematicians, and even theologians; and can I wonder at the insults I must suffer? I have declar'd my dis-appro-

bation of their systems; and can I be surpriz'd, if they shou'd express a hatred of mine and of my person? When I look abroad, I foresee on every side, dispute, contradiction, anger, calumny and detraction. When I turn my eye inward, I find nothing but doubt and ignorance. All the world conspires to oppose and contradict me; tho' such is my weakness, that I feel all my opinions loosen and fall of themselves, when unsupported by the approbation of others. Every step I take is with hesitation, and every new reflection makes me dread an error and absurdity in my reasoning.

For with what confidence can I venture upon such bold enterprises, when beside those numberless infirmities peculiar to myself, I find so many which are common to human nature? Can I be sure, that in leaving all establish'd opinions I am following truth; and by what criterion shall I distinguish her, even if fortune shou'd at last guide me on her foot-steps? After the most accurate and exact of my reasonings, I can give no reason why I shou'd assent to it; and feel nothing but a *strong* propensity to consider objects *strongly* in that view, under which they appear to me. Experience is a principle, which instructs me in the several conjunctions of objects for the past. Habit is another principle, which determines me to expect the same for the future; and both of them conspiring to operate upon the imagination, make me form certain ideas in a more intense and lively manner, than others, which are not attended with the same advantages. Without this quality, by which the mind enlivens some ideas beyond others (which seemingly is so trivial, and so little founded on reason) we cou'd never assent to any argument, nor carry our view beyond those few objects, which are present to our senses. Nay, even to these objects we cou'd never attribute any existence, but what was dependent on the senses; and must comprehend them entirely in that succession of perceptions, which constitutes our self or person. Nay farther, even with relation to that succession, we cou'd only admit of those perceptions, which are immediately present to our consciousness, nor cou'd those lively images, with which the memory presents us, be ever receiv'd as true pictures of past perceptions. The memory, senses, and understanding are, therefore, all of them founded on the imagination, or the vivacity of our ideas.

No wonder a principle so inconstant and fallacious shou'd lead us into errors, when implicitly follow'd (as it must be) in all its

variations. 'Tis this principle, which makes us reason from causes and effects; and 'tis the same principle, which convinces us of the continu'd existence of external objects, when absent from the senses. But tho' these two operations be equally natural and necessary in the human mind, yet in some circumstances they are directly contrary, nor is it possible for us to reason justly and regularly from causes and effects, and at the same time believe the continu'd existence of matter. How then shall we adjust those principles together? Which of them shall we prefer? Or in case we prefer neither of them, but successively assent to both, as is usual among philosophers, with what confidence can we afterwards usurp that glorious title, when we thus knowingly embrace a manifest contradiction?

This²³ contradiction wou'd be more excusable, were it compensated by any degree of solidity and satisfaction in the other parts of our reasoning. But the case is quite contrary. When we trace up the human understanding to its first principles, we find it to lead us into such sentiments, as seem to turn into ridicule all our past pains and industry, and to discourage us from future enquiries. Nothing is more curiously enquir'd after by the mind of man, than the causes of every phaenomenon; nor are we content with knowing the immediate causes, but push on our enquiries, till we arrive at the original and ultimate principle. We wou'd not willingly stop before we are acquainted with that energy in the cause, by which it operates on its effect; that tie, which connects them together; and that efficacious quality, on which the tie depends. This is our aim in all our studies and reflections: And how must we be disappointed, when we learn, that this connexion, tie, or energy lies merely in ourselves, and is nothing but that determination of the mind, which is acquir'd by custom, and causes us to make a transition from an object to its usual attendant, and from the impression of one to the lively idea of the other? Such a discovery not only cuts off all hope of ever attaining satisfaction, but even prevents our very wishes; since it appears, that when we say we desire to know the ultimate and operating principle, as something, which resides in the external object, we either contradict ourselves or talk without a meaning.

²³ Part III. Sect. 14.

This deficiency in our ideas is not, indeed, perceiv'd in common life, nor are we sensible, that in the most usual conjunctions of cause and effect we are as ignorant of the ultimate principle, which binds them together, as in the most unusual and extraordinary. But this proceeds merely from an illusion of the imagination; and the question is, how far we ought to yield to these illusions. This question is very difficult, and reduces us to a very dangerous dilemma, whichever way we answer it. For if we assent to every trivial suggestion of the fancy; beside that these suggestions are often contrary to each other; they lead us into such errors, absurdities, and obscurities, that we must at last become asham'd of our credulity. Nothing is more dangerous to reason than the flights of the imagination, and nothing has been the occasion of more mistakes among philosophers. Men of bright fancies may in this respect be compar'd to those angels, whom the scripture represents as covering their eyes with their wings. This has already appear'd in so many instances, that we may spare ourselves the trouble of enlarging upon it any farther.

But on the other hand, if the consideration of these instances makes us take a resolution to reject all the trivial suggestions of the fancy, and adhere to the understanding, that is, to the general and more establish'd properties of the imagination; even this resolution, if steadily executed, wou'd be dangerous, and attended with the most fatal consequences. For I have already shewn,²⁴ that the understanding, when it acts alone, and according to its most general principles, entirely subverts itself, and leaves not the lowest degree of evidence in any proposition, either in philosophy or common life. We save ourselves from this total scepticism only by means of that singular and seemingly trivial property of the fancy, by which we enter with difficulty into remote views of things, and are not able to accompany them with so sensible an impression, as we do those, which are more easy and natural. Shall we, then, establish it for a general maxim, that no refin'd or elaborate reasoning is ever to be receiv'd? Consider well the consequences of such a principle. By this means you cut off entirely all science and philosophy: You proceed upon one singular quality of the imagination, and by a parity of reason must embrace all of them: And your expresly contradict yourself; since this maxim must be built

²⁴ Part IV. Sect. 1.

on the preceding reasoning, which will be allow'd to be sufficiently refin'd and metaphysical. What party, then, shall we choose among these difficulties? If we embrace this principle, and condemn all refin'd reasoning, we run into the most manifest absurdities. If we reject it in favour of these reasonings, we subvert entirely the human understanding. We have, therefore, no choice left but betwixt a false reason and none at all. For my part, I know not what ought to be done in the present case. I can only observe what is commonly done; which is, that this difficulty is seldom or never thought of; and even where it has once been present to the mind, is quickly forgot, and leaves but a small impression behind it. Very refin'd reflections have little or no influence upon us; and yet we do not, and cannot establish it for a rule, that they ought not to have any influence; which implies a manifest contradiction.

But what have I here said, that reflections very refin'd and metaphysical have little or no influence upon us? This opinion I can scarce forbear retracting, and condemning from my present feeling and experience. The *intense* view of these manifold contradictions and imperfections in human reason has so wrought upon me, and heated my brain, that I am ready to reject all belief and reasoning, and can look upon no opinion even as more probable or likely than another. Where am I, or what? From what causes do I derive my existence, and to what condition shall I return? Whose favour shall I court, and whose anger must I dread? What beings surround me? and on whom have I any influence, or who have any influence on me? I am confounded with all these questions, and begin to fancy myself in the most deplorable condition imaginable, environ'd with the deepest darkness, and utterly depriv'd of the use of every member and faculty.

Most fortunately it happens, that since reason is incapable of dispelling these clouds, nature herself suffices to that purpose, and cures me of this philosophical melancholy and delirium, either by relaxing this bent of mind, or by some avocation, and lively impression of my senses, which obliterate all these chimeras. I dine, I play a game of back-gammon, I converse, and am merry with my friends; and when after three or four hours' amusement, I wou'd return to these speculations, they appear so cold, and strain'd, and ridiculous, that I cannot find in my heart to enter into them any farther.

Here then I find myself absolutely and necessarily determin'd to live, and talk, and act like other people in the common affairs of life. But notwithstanding that my natural propensity, and the course of my animal spirits and passions reduce me to this indolent belief in the general maxims of the world, I still feel such remains of my former disposition, that I am ready to throw all my books and papers into the fire, and resolve never more to renounce the pleasures of life for the sake of reasoning and philosophy. For those are my sentiments in that splenetic humour, which governs me at present. I may, nay I must yield to the current of nature, in submitting to my senses and understanding; and in this blind submission I shew most perfectly my sceptical disposition and principles. But does it follow, that I must strive against the current of nature, which leads me to indolence and pleasure; that I must seclude myself, in some measure, from the commerce and society of men, which is so agreeable; and that I must torture my brain with subtilities and sophistries, at the very time that I cannot satisfy myself concerning the reasonableness of so painful an application, nor have any tolerable prospect of arriving by its means at truth and certainty. Under what obligation do I lie of making such an abuse of time? And to what end can it serve either for the service of mankind, or for my own private interest? No: If I must be a fool, as all those who reason or believe any thing *certainly* are, my follies shall at least be natural and agreeable. Where I strive against my inclination, I shall have a good reason for my resistance; and will no more be led a wandering into such dreary solitudes, and rough passages, as I have hitherto met with.

These are the sentiments of my spleen and indolence; and indeed I must confess, that philosophy has nothing to oppose to them, and expects a victory more from the returns of a serious good-humour'd disposition, than from the force of reason and conviction. In all the incidents of life we ought still to preserve our scepticism. If we believe, that fire warms, or water refreshes, 'tis only because it costs us too much pains to think otherwise. Nay if we are philosophers, it ought only to be upon sceptical principles, and from an inclination, which we feel to the employing ourselves after that manner. Where reason is lively, and mixes itself with some propensity, it ought to be assented to. Where it does not, it never can have any title to operate upon us.

At the time, therefore, that I am tir'd with amusement and company, and have indulg'd a *reverie* in my chamber, or in a solitary walk by a river-side, I feel my mind all collected within itself, and am naturally *inclin'd* to carry my view into all those subjects, about which I have met with so many disputes in the course of my reading and conversation. I cannot forbear having a curiosity to be acquainted with the principles of moral good and evil, the nature and foundation of government, and the cause of those several passions and inclinations, which actuate and govern me. I am uneasy to think I approve of one object, and disapprove of another; call one thing beautiful, and another deform'd; decide concerning truth and falshood, reason and folly, without knowing upon what principles I proceed. I am concern'd for the condition of the learned world, which lies under such a deplorable ignorance in all these particulars. I feel an ambition to arise in me of contributing to the instruction of mankind, and of acquiring a name by my inventions and discoveries. These sentiments spring up naturally in my present disposition; and shou'd I endeavour to banish them, by attaching myself to any other business or diversion, I *feel* I shou'd be a loser in point of pleasure; and this is the origin of my philosophy.

But even suppose this curiosity and ambition shou'd not transport me into speculations without the sphere of common life, it wou'd necessarily happen, that from my very weakness I must be led into such enquiries. 'Tis certain, that superstition is much more bold in its systems and hypotheses than philosophy; and while the latter contents itself with assigning new causes and principles to the phaenomena, which appear in the visible world, the former opens a world of its own, and presents us with scenes, and beings, and objects, which are altogether new. Since therefore 'tis almost impossible for the mind of man to rest, like those of beasts, in that narrow circle of objects, which are the subject of daily conversation and action, we ought only to deliberate concerning the choice of our guide, and ought to prefer that which is safest and most agreeable. And in this respect I make bold to recommend philosophy, and shall not scruple to give it the preference to superstition of every kind or denomination. For as superstition arises naturally and easily from the popular opinions of mankind, it seizes more strongly on the mind, and is often able to disturb us in the conduct of our lives and actions. Philosophy on the con-

trary, if just, can present us only with mild and moderate sentiments; and if false and extravagant, its opinions are merely the objects of a cold and general speculation, and seldom go so far as to interrupt the course of our natural propensities. The CYNICS are an extraordinary instance of philosophers, who from reasonings purely philosophical ran into as great extravagancies of conduct as any *Monk* or *Dervise* that ever was in the world. Generally speaking, the errors in religion are dangerous; those in philosophy only ridiculous.

I am sensible, that these two cases of the strength and weakness of the mind will not comprehend all mankind, and that there are in *England*, in particular, many honest gentlemen, who being employ'd in their domestic affairs, or amusing themselves in common recreations, have carried their thoughts very little beyond those objects, which are every day expos'd to their senses. And indeed, of such as these I pretend not to make philosophers, nor do I expect them either to be associates in these researches or auditors of these discoveries. They do well to keep themselves in their present situation; and instead of refining them into philosophers, I wish we cou'd communicate to our founders of systems, a share of this gross earthy mixture, as an ingredient, which they commonly stand much in need of, and which wou'd serve to temper those fiery particles, of which they are compos'd. While a warm imagination is allow'd to enter into philosophy, and hypotheses embrac'd merely for being specious and agreeable, we can never have any steady principles, nor any sentiments, which will suit with common practice and experience. But were these hypotheses once remov'd, we might hope to establish a system or set of opinions, which if not true (for that, perhaps, is too much to be hop'd for) might at least be satisfactory to the human mind, and might stand the test of the most critical examination. Nor shou'd we despair of attaining this end, because of the many chimerical systems, which have successively arisen and decay'd away among men, wou'd we consider the shortness of that period, wherein these questions have been the subjects of enquiry and reasoning. Two thousand years with such long interruptions, and under such mighty discouragements are a small space of time to give any tolerable perfection to the sciences; and perhaps we are still in too early an age of the world to discover any principles, which will bear the examination

of the latest posterity. For my part, my only hope is, that I may contribute a little to the advancement of knowledge, by giving in some particulars a different turn to the speculations of philosophers, and pointing out to them more distinctly those subjects, where alone they can expect assurance and conviction. Human Nature is the only science of man; and yet has been hitherto the most neglected. 'Twill be sufficient for me, if I can bring it a little more into fashion; and the hope of this serves to compose my temper from that spleen, and invigorate it from that indolence, which sometimes prevail upon me. If the reader finds himself in the same easy disposition, let him follow me in my future speculations. If not, let him follow his inclination, and wait the returns of application and good humour. The conduct of a man, who studies philosophy in this careless manner, is more truly sceptical than that of one, who feeling in himself an inclination to it, is yet so over-whelm'd with doubts and scruples, as totally to reject it. A true sceptic will be diffident of his philosophical doubts, as well as of his philosophical conviction; and will never refuse any innocent satisfaction, which offers itself, upon account of either of them.

Nor is it only proper we shou'd in general indulge our inclination in the most elaborate philosophical researches, notwithstanding our sceptical principles, but also that we shou'd yield to that propensity, which inclines us to be positive and certain in *particular points*, according to the light, in which we survey them in any *particular instant*. 'Tis easier to forbear all examination and enquiry, than to check ourselves in so natural a propensity, and guard against that assurance, which always arises from an exact and full survey of an object. On such an occasion we are apt not only to forget our scepticism, but even our modesty too; and make use of such terms as these, '*tis evident*, '*tis certain*, '*tis undeniable*; which a due deference to the public ought, perhaps, to prevent. I may have fallen into this fault after the example of others; but I here enter a *caveat* against any objections, which may be offer'd on that head; and declare that such expressions were extorted from me by the present view of the object, and imply no dogmatical spirit, nor conceited idea of my own judgment, which are sentiments that I am sensible can become no body, and a sceptic still less than any other. . . .

APPENDIX²⁵

There is nothing I wou'd more willingly lay hold of, than an opportunity of confessing my errors; and shou'd esteem such a return to truth and reason to be more honourable than the most unerring judgment. A man, who is free from mistakes, can pretend to no praises, except from the justness of his understanding: But a man, who corrects his mistakes, shews at once the justness of his understanding, and the candour and ingenuity of his temper. I have not yet been so fortunate as to discover any very considerable mistakes in the reasonings deliver'd in the preceding volumes, except on one article: But I have found by experience, that some of my expressions have not been so well chosen, as to guard against all mistakes in the readers; and 'tis chiefly to remedy this defect, I have subjoin'd the following appendix.

We can never be induc'd to believe any matter of fact, except where its cause, or its effect, is present to us; but what the nature is of that belief, which arises from the relation of cause and effect, few have had the curiosity to ask themselves. In my opinion, this dilemma is inevitable. Either the belief is some new idea, such as that of *reality* or *existence*, which we join to the simple conception of an object, or it is merely a peculiar *feeling* or *sentiment*. That it is not a new idea, annex'd to the simple conception, may be evinc'd from these two arguments. *First*, We have no abstract idea of existence, distinguishable and separable from the idea of particular objects. 'Tis impossible, therefore, that this idea of existence can be annex'd to the idea of any object, or form the difference betwixt a simple conception and belief. *Secondly*, The mind has the command over all its ideas, and can separate, unite, mix, and vary them, as it pleases; so that if belief consisted merely in a new idea, annex'd to the conception, it wou'd be in a man's power to believe what he pleas'd. We may, therefore, conclude, that belief consists merely in a certain feeling or sentiment; in something, that depends not on the will, but must arise from certain determinate causes and principles, of which we are not masters. When we are convinc'd of any matter of fact, we do nothing but conceive it, along with a certain feeling, different from what attends the mere *reveries* of the imagination. And when we express

²⁵ [Published at the close of Book III.]

our incredulity concerning any fact, we mean, that the arguments for the fact produce not that feeling. Did not the belief consist in a sentiment different from our mere conception, whatever objects were presented by the wildest imagination, wou'd be on an equal footing with the most establish'd truths founded on history and experience. There is nothing but the feeling, or sentiment, to distinguish the one from the other.

This, therefore, being regarded as an undoubted truth, *that belief is nothing but a peculiar feeling, different from the simple conception*, the next question, that naturally occurs, is, *what is the nature of this feeling, or sentiment, and whether it be analogous to any other sentiment of the human mind?* This question is important. For if it be not analogous to any other sentiment, we must despair of explaining its causes, and must consider it as an original principle of the human mind. If it be analogous, we may hope to explain its causes from analogy, and trace it up to more general principles. Now that there is a greater firmness and solidity in the conceptions, which are the objects of conviction and assurance, than in the loose and indolent reveries of a castle-builder, every one will readily own. They strike upon us with more force; they are more present to us; the mind has a firmer hold of them, and is more actuated and mov'd by them. It acquiesces in them; and, in a manner, fixes and reposes itself on them. In short, they approach nearer to the impressions, which are immediately present to us; and are therefore analogous to many other operations of the mind.

There is not, in my opinion, any possibility of evading this conclusion, but by asserting, that belief, beside the simple conception, consists in some impression or feeling, distinguishable from the conception. It does not modify the conception, and render it more present and intense: It is only annex'd to it, after the same manner that *will* and *desire* are annex'd to particular conceptions of good and pleasure. But the following considerations will, I hope, be sufficient to remove this hypothesis. *First*, It is directly contrary to experience, and our immediate consciousness. All men have ever allow'd reasoning to be merely an operation of our thoughts or ideas; and however those ideas may be varied to the feeling, there is nothing ever enters into our *conclusions* but ideas, or our fainter conceptions. For instance; I hear at present a person's voice, whom

I am acquainted with; and this sound comes from the next room. This impression of my senses immediately conveys my thoughts to the person, along with all the surrounding objects. I paint them out to myself as existent at present, with the same qualities and relations, that I formerly knew them possess'd of. These ideas take faster hold of my mind, than the ideas of an enchanted castle. They are different to the feeling; but there is no distinct or separate impression attending them. 'Tis the same case when I recollect the several incidents of a journey, or the events of any history. Every particular fact is there the object of belief. Its idea is modified differently from the loose reveries of a castle-builder: But no distinct impression attends every distinct idea, or conception of matter of fact. This is the subject of plain experience. If ever this experience can be disputed on any occasion, 'tis when the mind has been agitated with doubts and difficulties; and afterwards, upon taking the object in a new point of view, or being presented with a new argument, fixes and reposes itself in one settled conclusion and belief. In this case there is a feeling distinct and separate from the conception. The passage from doubt and agitation to tranquility and repose, conveys a satisfaction and pleasure to the mind. But take any other case. Suppose I see the legs and thighs of a person in motion, while some interpos'd object conceals the rest of his body. Here 'tis certain, the imagination spreads out the whole figure. I give him a head and shoulders, and breast and neck. These members I conceive and believe him to be possess'd of. Nothing can be more evident, than that this whole operation is perform'd by the thought or imagination alone. The transition is immediate. The ideas presently strike us. Their customary connexion with the present impression, varies them and modifies them in a certain manner, but produces no act of the mind, distinct from this peculiarity of conception. Let any one examine his own mind, and he will evidently find this to be the truth.

Secondly, Whatever may be the case, with regard to this distinct impression, it must be allow'd, that the mind has a firmer hold, or more steady conception of what it takes to be matter of fact, than of fictions. Why then look any farther, or multiply suppositions without necessity?

Thirdly, We can explain the *causes* of the firm conception, but not those of any separate impression. And not only so, but the causes

of the firm conception exhaust the whole subject, and nothing is left to produce any other effect. An inference concerning a matter of fact is nothing but the idea of an object, that is frequently conjoin'd, or is associated with a present impression. This is the whole of it. Every part is requisite to explain, from analogy, the more steady conception; and nothing remains capable of producing any distinct impression.

Fourthly, The *effects* of belief, in influencing the passions and imagination, can all be explain'd from the firm conception; and there is no occasion to have recourse to any other principle. These arguments, with many others, enumerated in the foregoing volumes, sufficiently prove, that belief only modifies the idea or conception; and renders it different to the feeling, without producing any distinct impression.

Thus upon a general view of the subject, there appear to be two questions of importance, which we may venture to recommend to the consideration of philosophers, *Whether there be any thing to distinguish belief from the simple conception beside the feeling or sentiment? And, Whether this feeling be any thing but a firmer conception, or a faster hold that we take of the object?*

If, upon impartial enquiry, the same conclusion, that I have form'd, be assented to by philosophers, the next business is to examine the analogy, which there is betwixt belief, and other acts of the mind, and find the cause of the firmness and strength of conception: And this I do not esteem a difficult task. The transition from a present impression, always enlivens and strengthens any idea. When any object is presented, the idea of its usual attendant immediately strikes us, as something real and solid. 'Tis felt, rather than conceiv'd, and approaches the impression, from which it is deriv'd, in its force and influence. This I have prov'd at large. . . .

I had entertain'd some hopes, that however deficient our theory of the intellectual world might be, it wou'd be free from those contradictions, and absurdities, which seem to attend every explication, that human reason can give of the material world. But upon a more strict review of the section concerning *personal identity*, I find myself involv'd in such a labyrinth, that, I must confess, I neither know how to correct my former opinions, nor how to render them consistent. If this be not a good *general* reason for scepti-

cism, 'tis at least a sufficient one (if I were not already abundantly supplied) for me to entertain a diffidence and modesty in all my decisions. I shall propose the arguments on both sides, beginning with those that induc'd me to deny the strict and proper identity and simplicity of a self or thinking being.

When we talk of *self* or *substance*, we must have an idea annex'd to these terms, otherwise they are altogether unintelligible. Every idea is deriv'd from preceding impressions; and we have no impression of self or substance, as something simple and individual. We have, therefore, no idea of them in that sense.

Whatever is distinct, is distinguishable; and whatever is distinguishable, is separable by the thought or imagination. All perceptions are distinct. They are, therefore, distinguishable, and separable, and may be conceiv'd as separately existent, and may exist separately, without any contradiction or absurdity.

When I view this table and that chimney, nothing is present to me but particular perceptions, which are of a like nature with all the other perceptions. This is the doctrine of philosophers. But this table, which is present to me, and that chimney, may and do exist separately. This is the doctrine of the vulgar, and implies no contradiction. There is no contradiction, therefore, in extending the same doctrine to all the perceptions.

In general, the following reasoning seems satisfactory. All ideas are borrow'd from preceding perceptions. Our ideas of objects, therefore, are deriv'd from that source. Consequently no proposition can be intelligible or consistent with regard to objects, which is not so with regard to perceptions. But 'tis intelligible and consistent to say, that objects exist distinct and independent, without any common simple substance or subject of inhesion. This proposition, therefore, can never be absurd with regard to perceptions.

When I turn my reflexion on *myself*, I can never perceive this *self* without some one or more perceptions; nor can I ever perceive any thing but the perceptions. 'Tis the composition of these, therefore, which forms the self.

We can conceive a thinking being to have either many or few perceptions. Suppose the mind to be reduc'd even below the life of an oyster. Suppose it to have only one perception, as of thirst or hunger. Consider it in that situation. Do you conceive any thing but merely that perception? Have you any notion of *self*

or *substance*? If not, the addition of other perceptions can never give you that notion.

The annihilation, which some people suppose to follow upon death, and which entirely destroys this self, is nothing but an extinction of all particular perceptions; love and hatred, pain and pleasure, thought and sensation. These therefore must be the same with self; since the one cannot survive the other.

Is *self* the same with *substance*? If it be, how can that question have place, concerning the subsistence of self, under a change of substance? If they be distinct, what is the difference betwixt them? For my part, I have a notion of neither, when conceiv'd distinct from particular perceptions.

Philosophers begin to be reconcil'd to the principle, *that we have no idea of external substance, distinct from the ideas of particular qualities*. This must pave the way for a like principle with regard to the mind, *that we have no notion of it, distinct from the particular perceptions*.

So far I seem to be attended with sufficient evidence. But having thus loosen'd all our particular perceptions, when I proceed to explain the principle of connexion, which binds them together, and makes us attribute to them a real simplicity and identity; I am sensible, that my account is very defective, and that nothing but the seeming evidence of the precedent reasonings cou'd have induc'd me to receive it. If perceptions are distinct existences, they form a whole only by being connected together. But no connexions among distinct existences are ever discoverable by human understanding. We only *feel* a connexion or determination of the thought, to pass from one object to another. It follows, therefore, that the thought alone finds personal identity, when reflecting on the train of past perceptions, that compose a mind, the ideas of them are felt to be connected together, and naturally introduce each other. However extraordinary this conclusion may seem, it need not surprise us. Most philosophers seem inclin'd to think, that personal identity *arises* from consciousness; and consciousness is nothing but a reflected thought or perception. The present philosophy, therefore, has so far a promising aspect. But all my hopes vanish, when I come to explain the principles, that unite our successive perceptions in our thought or consciousness. I cannot discover any theory, which gives me satisfaction on this head.

In short there are two principles, which I cannot render consistent; nor is it in my power to renounce either of them, viz. *that all our distinct perceptions are distinct existences, and that the mind never perceives any real connexion among distinct existences*. Did our perceptions either inhere in something simple and individual, or did the mind perceive some real connexion among them, there wou'd be no difficulty in the case. For my part, I must plead the privilege of a sceptic, and confess, that this difficulty is too hard for my understanding. I pretend not, however, to pronounce it absolutely insuperable. Others, perhaps, or myself, upon more mature reflexions, may discover some hypothesis, that will reconcile those contradictions. . . .

BOOK III. OF MORALS

PART I. OF VIRTUE AND VICE IN GENERAL

SEC. I. *Moral Distinctions Not Deriv'd from Reason*

There is an inconvenience which attends all abstruse reasoning, that it may silence, without convincing an antagonist, and requires the same intense study to make us sensible of its force, that was at first requisite for its invention. When we leave our closet, and engage in the common affairs of life, its conclusions seem to vanish, like the phantoms of the night on the appearance of the morning; and 'tis difficult for us to retain even that conviction, which we had attain'd with difficulty. This is still more conspicuous in a long chain of reasoning, where we must preserve to the end the evidence of the first propositions, and where we often lose sight of all the most receiv'd maxims, either of philosophy or common life. I am not, however, without hopes, that the present system of philosophy will acquire new force as it advances; and that our reasonings concerning *morals* will corroborate whatever has been said concerning the *understanding* and the *passions*. Morality is a subject that interests us above all others: We fancy the peace of society to be at stake in every decision concerning it; and 'tis evident, that this concern must make our speculations appear more real and solid, than where the subject is, in a great measure, indifferent to us. What affects us, we conclude can never be a chimaera; and as our passion is engag'd on the one side or the other,

we naturally think that the question lies within human comprehension; which, in other cases of this nature, we are apt to entertain some doubt of. Without this advantage I never should have ventur'd upon a third volume of such abstruse philosophy, in an age, wherein the greatest part of men seem agreed to convert reading into an amusement, and to reject every thing that requires any considerable degree of attention to be comprehended.

It has been observ'd, that nothing is ever present to the mind but its perceptions; and that all the actions of seeing, hearing, judging, loving, hating, and thinking, fall under this denomination. The mind can never exert itself in any action, which we may not comprehend under the term of *perception*; and consequently that term is no less applicable to those judgments, by which we distinguish moral good and evil, than to every other operation of the mind. To approve of one character, to condemn another, are only so many different perceptions.

Now as perceptions resolve themselves into two kinds, viz. *impressions* and *ideas*, this distinction gives rise to a question, with which we shall open up our present enquiry concerning morals, *Whether 'tis by means of our ideas or impressions we distinguish betwixt vice and virtue, and pronounce an action blameable or praiseworthy?* This will immediately cut off all loose discourses and declamations, and reduce us to something precise and exact on the present subject.

Those who affirm that virtue is nothing but a conformity to reason; that there are eternal fitnesses and unfitnesses of things, which are the same to every rational being that considers them; that the immutable measures of right and wrong impose an obligation, not only on human creatures, but also on the Deity himself: All these systems concur in the opinion, that morality, like truth, is discern'd merely by ideas, and by their juxta-position and comparison. In order, therefore, to judge of these systems, we need only consider, whether it be possible, from reason alone, to distinguish betwixt moral good and evil, or whether there must concur some other principles to enable us to make that distinction.

If morality had naturally no influence on human passions and actions, 'twere in vain to take such pains to inculcate it; and nothing wou'd be more fruitless than that multitude of rules and precepts, with which all moralists abound. Philosophy is commonly

divided into speculative and practical; and as morality is always comprehended under the latter division, 'tis supposed to influence our passions and actions, and to go beyond the calm and indolent judgments of the understanding. And this is confirm'd by common experience, which informs us, that men are often govern'd by their duties, and are deter'd from some actions by the opinion of injustice and impell'd to others by that of obligation.

Since morals, therefore, have an influence on the actions and affections, it follows, that they cannot be deriv'd from reason; and that because reason alone, as we have already prov'd, can never have any such influence. Morals excite passions, and produce or prevent actions. Reason of itself is utterly impotent in this particular. The rules of morality, therefore, are not conclusions of our reason.

No one, I believe, will deny the justness of this inference; nor is there any other means of evading it, than by denying that principle, on which it is founded. As long as it is allow'd, that reason has no influence on our passions and actions, 'tis in vain to pretend, that morality is discover'd only by a deduction of reason. An active principle can never be founded on an inactive; and if reason be inactive in itself, it must remain so in all its shapes and appearances, whether it exerts itself in natural or moral subjects, whether it considers the powers of external bodies, or the actions of rational beings.

It would be tedious to repeat all the arguments, by which I have prov'd, that reason is perfectly inert, and can never either prevent or produce any action or affection. 'Twill be easy to recollect what has been said upon that subject. I shall only recall on this occasion one of these arguments, which I shall endeavour to render still more conclusive, and more applicable to the present subject.

Reason is the discovery of truth or falshood. Truth or falshood consists in an agreement or disagreement either to the *real* relations of ideas, or to *real* existence and matter of fact. Whatever, therefore, is not susceptible of this agreement or disagreement, is incapable of being true or false, and can never be an object of our reason. Now 'tis evident our passions, volitions, and actions, are not susceptible of any such agreement or disagreement; being original facts and realities, compleat in themselves, and implying no

reference to other passions, volitions, and actions. 'Tis impossible, therefore, they can be pronounced either true or false, and be either contrary or conformable to reason.

This argument is of double advantage to our present purpose. For it proves *directly*, that actions do not derive their merit from a conformity to reason, nor their blame from a contrariety to it; and it proves the same truth more *indirectly*, by shewing us, that as reason can never immediately prevent or produce any action by contradicting or approving of it, it cannot be the source of moral good and evil, which are found to have that influence. Actions may be laudable or blameable; but they cannot be reasonable or unreasonable: Laudable or blameable, therefore, are not the same with reasonable or unreasonable. The merit and demerit of actions frequently contradict, and sometimes controul our natural propensities. But reason has no such influence. Moral distinctions, therefore, are not the offspring of reason. Reason is wholly inactive, and can never be the source of so active a principle as conscience, or a sense of morals.

But perhaps it may be said, that tho' no will or action can be immediately contradictory to reason, yet we may find such a contradiction in some of the attendants of the action, that is, in its causes or effects. The action may cause a judgment, or may be *obliquely* caus'd by one, when the judgment concurs with a passion; and by an abusive way of speaking, which philosophy will scarce allow of, the same contrariety may, upon that account, be ascrib'd to the action. How far this truth or falshood may be the source of morals, 'twill now be proper to consider.

It has been observ'd, that reason, in a strict and philosophical sense, can have an influence on our conduct only after two ways: Either when it excites a passion by informing us of the existence of something which is a proper object of it; or when it discovers the connexion of causes and effects, so as to afford us means of exerting any passion. These are the only kinds of judgment, which can accompany our actions, or can be said to produce them in any manner; and it must be allow'd, that these judgments may often be false and erroneous. A person may be affected with passion, by supposing a pain or pleasure to lie in an object, which has no tendency to produce either of these sensations, or which produces the contrary to what is imagin'd. A person may also take false

measures for the attaining his end, and may retard, by his foolish conduct, instead of forwarding the execution of any project. These false judgments may be thought to affect the passions and actions, which are connected with them, and may be said to render them unreasonable, in a figurative and improper way of speaking. But tho' this be acknowledg'd, 'tis easy to observe, that these errors are so far from being the source of all immorality, that they are commonly very innocent, and draw no manner of guilt upon the person who is so unfortunate as to fall into them. They extend not beyond a mistake of fact, which moralists have not generally suppos'd criminal, as being perfectly involuntary. I am more to be lamented than blam'd, if I am mistaken with regard to the influence of objects in producing pain or pleasure, or if I know not the proper means of satisfying my desires. No one can ever regard such errors as a defect in my moral character. A fruit, for instance, that is really disagreeable, appears to me at a distance, and thro' mistake I fancy it to be pleasant and delicious. Here is one error. I choose certain means of reaching this fruit, which are not proper for my end. Here is a second error; nor is there any third one, which can ever possibly enter into our reasonings concerning actions. I ask, therefore, if a man, in this situation, and guilty of these two errors, is to be regarded as vicious and criminal, however unavoidable they might have been? Or if it be possible to imagine, that such errors are the sources of all immorality?

And here it may be proper to observe, that if moral distinctions be deriv'd from the truth or falshood of those judgments, they must take place wherever we form the judgments; nor will there be any difference, whether the question be concerning an apple or a kingdom, or whether the error be avoidable or unavoidable. For as the very essence of morality is suppos'd to consist in an agreement or disagreement to reason, the other circumstances are entirely arbitrary, and can never either bestow on any action the character of virtuous or vicious, or deprive it of that character. To which we may add, that this agreement or disagreement, not admitting of degrees, all virtues and vices wou'd of course be equal.

Shou'd it be pretended, that tho' a mistake of *fact* be criminal, yet a mistake of *right* often is; and that this may be the source of immorality: I would answer, that 'tis impossible such a mistake can ever be the original source of immorality, since it supposes a

real right and wrong; that is, a real distinction in morals, independent of these judgments. A mistake, therefore, of right may become a species of immorality; but 'tis only a secondary one, and is founded on some other, antecedent to it.

As to those judgments which are the *effects* of our actions, and which, when false, give occasion to pronounce the actions contrary to truth and reason; we may observe, that our actions never cause any judgment, either true or false, in ourselves, and that 'tis only on others they have such an influence. 'Tis certain, that an action, on many occasions, may give rise to false conclusions in others; and that a person, who thro' a window sees any lewd behaviour of mine with my neighbour's wife, may be so simple as to imagine she is certainly my own. In this respect my action resembles somewhat a lye or falshood; only with this difference, which is material, that I perform not the action with any intention of giving rise to a false judgment in another, but merely to satisfy my lust and passion. It causes, however, a mistake and false judgment by accident; and the falshood of its effects may be ascribed, by some odd figurative way of speaking, to the action itself. But still I can see no pretext of reason for asserting, that the tendency to cause such an error is the first spring or original source of all immorality.

Thus upon the whole, 'tis impossible, that the distinction betwixt moral good and evil, can be made by reason; since that distinction has an influence upon our actions, of which reason alone is incapable. Reason and judgment may, indeed, be the mediate cause of an action, by prompting, or by directing a passion: But it is not pretended, that a judgment of this kind, either in its truth or falshood, is attended with virtue or vice. And as to the judgments, which are caused by our judgments, they can still less bestow those moral qualities on the actions, which are their causes.

But to be more particular, and to shew, that those eternal immutable fitnesses and unfitnesses of things cannot be defended by sound philosophy, we may weigh the following considerations.

If the thought and understanding were alone capable of fixing the boundaries of right and wrong, the character of virtuous and vicious either must lie in some relations of objects, or must be a matter of fact, which is discovered by our reasoning. This consequence is evident. As the operations of human understanding divide themselves into two kinds, the comparing of ideas, and the

inferring of matter of fact; were virtue discover'd by the understanding; it must be an object of one of these operations, nor is there any third operation of the understanding, which can discover it. There has been an opinion very industriously propagated by certain philosophers, that morality is susceptible of demonstration; and tho' no one has ever been able to advance a single step in those demonstrations; yet 'tis taken for granted, that this science may be brought to an equal certainty with geometry or algebra. Upon this supposition, vice and virtue must consist in some relations; since 'tis allow'd on all hands, that no matter of fact is capable of being demonstrated. Let us, therefore, begin with examining this hypothesis, and endeavour, if possible, to fix those moral qualities, which have been so long the objects of our fruitless researches. Point out distinctly the relations, which constitute morality or obligation, that we may know wherein they consist, and after what manner we must judge of them.

If you assert, that vice and virtue consists in relations susceptible of certainty and demonstration, you must confine yourself to those *four* relations, which alone admit of that degree of evidence; and in that case you run into absurdities, from which you will never be able to extricate yourself. For as you make the very essence of morality to lie in the relations, and as there is no one of these relations but what is applicable, not only to an irrational, but also to an inanimate object; it follows, that even such objects must be susceptible of merit or demerit. *Resemblance, contrariety, degrees in quality, and proportions in quantity and number*; all these relations belong as properly to matter, as to our actions, passions, and volitions. 'Tis unquestionable, therefore, that morality lies not in any of these relations, nor the sense of it in their discovery.²⁶

²⁶ As a proof, how confus'd our way of thinking on this subject commonly is, we may observe, that those who assert, that morality is demonstrable, do not say, that morality lies in the relations, and that the relations are distinguishable by reason. They only say, that reason can discover such an action, in such relations, to be virtuous, and such another vicious. It seems they thought it sufficient, if they cou'd bring the word, Relation, into the proposition, without troubling themselves whether it was to the purpose or not. But here, I think, is plain argument. Demonstrative reason discovers only relations. But that reason, according to this hypothesis, discovers also vice and virtue. These moral qualities, therefore, must be relations. When we blame any action, in any situation, the whole complicated object, of action and situation, must form certain relations, wherein the essence of vice consists. This hypothesis is not otherwise intelligible. For what does reason discover, when it pronounces any action vicious? Does it discover a relation or a matter of fact? These questions are decisive, and must not be eluded.

Shou'd it be asserted, that the sense of morality consists in the discovery of some relation, distinct from these, and that our enumeration was not compleat, when we comprehended all demonstrable relations under four general heads: To this I know not what to reply, till some one be so good as to point out to me this new relation. 'Tis impossible to refute a system, which has never yet been explain'd. In such a manner of fighting in the dark, a man loses his blows in the air, and often places them where the enemy is not present.

I must, therefore, on this occasion, rest contented with requiring the two following conditions of any one that wou'd undertake to clear up this system. *First*, As moral good and evil belong only to the actions of the mind, and are deriv'd from our situation with regard to external objects, the relations from which these moral distinctions arise, must lie only betwixt internal actions, and external objects, and must not be applicable either to internal actions, compared among themselves, or to external objects, when placed in opposition to other external objects. For as morality is supposed to attend certain relations, if these relations cou'd belong to internal actions consider'd singly, it wou'd follow, that we might be guilty of crimes in ourselves, and independent of our situation, with respect to the universe: And in like manner, if these moral relations cou'd be apply'd to external objects, it wou'd follow, that even inanimate beings wou'd be susceptible of moral beauty and deformity. Now it seems difficult to imagine, that any relation can be discover'd betwixt our passions, volitions and actions, compared to external objects, which relation might not belong either to these passions and volitions, or to these external objects, compar'd among *themselves*.

But it will be still more difficult to fulfil the *second* condition, requisite to justify this system. According to the principles of those who maintain an abstract rational difference betwixt moral good and evil, and a natural fitness and unfitness of things, 'tis not only suppos'd that these relations, being eternal and immutable, are the same, when consider'd by every rational creature, but their *effects* are also suppos'd to be necessarily the same; and 'tis concluded they have no less, or rather a greater, influence in directing the will of the deity, than in governing the rational and virtuous of our own species. These two particulars are evidently distinct. 'Tis one thing to know virtue, and another to conform the will to

it. In order, therefore, to prove, that the measures of right and wrong are eternal laws, *obligatory* on every rational mind, 'tis not sufficient to shew the relations upon which they are founded: We must also point out the connexion betwixt the relation and the will; and must prove that this connexion is so necessary, that in every well-disposed mind, it must take place and have its influence; tho' the difference betwixt these minds be in other respects immense and infinite. Now besides what I have already prov'd, that even in human nature no relation can ever alone produce any action; besides this, I say, it has been shewn, in treating of the understanding, that there is no connexion of cause and effect, such as this is suppos'd to be, which is discoverable otherwise than by experience, and of which we can pretend to have any security by the simple consideration of the objects. All beings in the universe, consider'd in themselves, appear entirely loose and independent of each other. 'Tis only by experience we learn their influence and connexion; and this influence we ought never to extend beyond experience.

Thus it will be impossible to fulfil the *first* condition required to the system of eternal rational measures of right and wrong; because it is impossible to shew those relations, upon which such a distinction may be founded: And 'tis as impossible to fulfil the *second* condition; because we cannot prove *a priori*, that these relations, if they really existed and were perceiv'd, wou'd be universally forcible and obligatory.

But to make these general reflections more clear and convincing, we may illustrate them by some particular instances, wherein this character of moral good or evil is the most universally acknowledged. Of all crimes that human creatures are capable of committing, the most horrid and unnatural is ingratitude, especially when it is committed against parents, and appears in the more flagrant instances of wounds and death. This is acknowledg'd by all mankind, philosophers as well as the people; the question only arises among philosophers, whether the guilt or moral deformity of this action be discover'd by demonstrative reasoning, or be felt by an internal sense, and by means of some sentiment, which the reflecting on such an action naturally occasions. This question will soon be decided against the former opinion, if we can shew the same relations in other objects, without the notion of any guilt or in-

iquity attending them. Reason or science is nothing but the comparing of ideas, and the discovery of their relations; and if the same relations have different characters, it must evidently follow, that those characters are not discover'd merely by reason. To put the affair, therefore, to this trial, let us chuse any inanimate object, such as an oak or elm; and let us suppose, that by the dropping of its seed, it produces a sapling below it, which springing up by degrees, at last overtops and destroys the parent tree: I ask, if in this instance there be wanting any relation, which is discoverable in parricide or ingratitude? Is not the one tree the cause of the other's existence; and the latter the cause of the destruction of the former, in the same manner as when a child murders his parent? 'Tis not sufficient to reply, that a choice or will is wanting. For in the case of parricide, a will does not give rise to any *different* relations, but is only the cause from which the action is deriv'd; and consequently produces the *same* relations, that in the oak or elm arise from some other principles. 'Tis a will or choice, that determines a man to kill his parent; and they are the laws of matter and motion, that determine a sapling to destroy the oak, from which it sprung. Here then the same relations have different causes; but still the relations are the same: And as their discovery is not in both cases attended with a notion of immorality, it follows, that that notion does not arise from such a discovery.

But to chuse an instance, still more resembling; I would fain ask any one, why incest in the human species is criminal, and why the very same action, and the same relations in animals have not the smallest moral turpitude and deformity? If it be answer'd, that this action is innocent in animals, because they have not reason sufficient to discover its turpitude; but that man, being endow'd with that faculty, which *ought* to restrain him to his duty, the same action instantly becomes criminal to him; should this be said, I would reply, that this is evidently arguing in a circle. For before reason can perceive this turpitude, the turpitude must exist; and consequently is independent of the decisions of our reason, and is their object more properly than their effect. According to this system, then, every animal, that has sense, and appetite, and will; that is, every animal must be susceptible of all the same virtues and vices, for which we ascribe praise and blame to human creatures. All the difference is, that our superior reason may serve to

discover the vice or virtue, and by that means may augment the blame or praise: But still this discovery supposes a separate being in these moral distinctions, and a being, which depends only on the will and appetite, and which, both in thought and reality, may be distinguish'd from the reason. Animals are susceptible of the same relations, with respect to each other, as the human species, and therefore wou'd also be susceptible of the same morality, if the essence of morality consisted in these relations. Their want of a sufficient degree of reason may hinder them from perceiving the duties and obligations of morality, but can never hinder these duties from existing; since they must antecedently exist, in order to their being perceiv'd. Reason must find them, and can never produce them. This argument deserves to be weigh'd, as being, in my opinion, entirely decisive.

Nor does this reasoning only prove, that morality consists not in any relations, that are the objects of science; but if examin'd will prove with equal certainty, that it consists not in any *matter of fact*, which can be discover'd by understanding. This is the *second* part of our argument; and if it can be made evident, we may conclude, that morality is not an object of reason. But can there be any difficulty in proving, that vice and virtue are not matters of fact, whose existence we can infer by reason? Take any action allow'd to be vicious; Wilful murder, for instance. Examine it in all lights, and see if you can find that matter of fact, or real existence, which you call *vice*. In which-ever way you take it, you find only certain passions, motives, volitions and thoughts. There is no other matter of fact in the case. The vice entirely escapes you, as long as you consider the object. You never can find it, till you turn your reflection into your own breast, and find a sentiment of disapprobation, which arises in you, towards this action. Here is a matter of fact; but 'tis the object of feeling, not of reason. It lies in yourself, not in the object. So that when you pronounce any action or character to be vicious, you mean nothing, but that from the constitution of your nature you have a feeling or sentiment of blame from the contemplation of it. Vice and virtue, therefore, may be compar'd to sounds, colours, heat and cold, which, according to modern philosophy, are not qualities in objects, but perceptions in the mind: And this discovery in morals, like that other in physics, is to be regarded as a considerable advancement of the

speculative sciences; tho', like that too, it has little or no influence on practice. Nothing can be more real, or concern us more, than our own sentiments of pleasure and uneasiness; and if these be favourable to virtue, and unfavourable to vice, no more can be requisite to the regulation of our conduct and behaviour.

I cannot forbear adding to these reasonings an observation, which may, perhaps, be found of some importance. In every system of morality, which I have hitherto met with, I have always remark'd, that the author proceeds for some time in the ordinary way of reasoning, and establishes the being of a God, or makes observations concerning human affairs; when of a sudden I am surpriz'd to find, that instead of the usual copulations of propositions, *is*, and *is not*, I meet with no proposition that is not connected with an *ought*, or an *ought not*. This change is imperceptible; but is, however, of the last consequence. For as this *ought*, or *ought not*, expresses some new relation or affirmation, 'tis necessary that it shou'd be observ'd and explain'd; and at the same time that a reason should be given, for what seems altogether inconceivable, how this new relation can be a deduction from others, which are entirely different from it. But as authors do not commonly use this precaution, I shall presume to recommend it to the readers; and am persuaded, that this small attention wou'd subvert all the vulgar systems of morality, and let us see, that the distinction of vice and virtue is not founded merely on the relations of objects, nor is perceiv'd by reason.

SEC. II. *Moral Distinctions Deriv'd from a Moral Sense*

Thus the course of the argument leads us to conclude, that since vice and virtue are not discoverable merely by reason, or the comparison of ideas, it must be by means of some impression or sentiment they occasion, that we are able to mark the difference betwixt them. Our decisions concerning moral rectitude and depravity are evidently perceptions; and as all perceptions are either impressions or ideas, the exclusion of the one is a convincing argument for the other. Morality, therefore, is more properly felt than judg'd of; tho' this feeling or sentiment is commonly so soft and gentle, that we are apt to confound it with an idea, according to our common custom of taking all things for the same, which have any near resemblance to each other.

The next question is, Of what nature are these impressions, and after what manner do they operate upon us? Here we cannot remain long in suspense, but must pronounce the impression arising from virtue, to be agreeable, and that proceeding from vice to be uneasy. Every moment's experience must convince us of this. There is no spectacle so fair and beautiful as a noble and generous action; nor any which gives us more abhorrence than one that is cruel and treacherous. No enjoyment equals the satisfaction we receive from the company of those we love and esteem; as the greatest of all punishments is to be oblig'd to pass our lives with those we hate or condemn. A very play or romance may afford us instances of this pleasure, which virtue conveys to us; and pain, which arises from vice.

Now since the distinguishing impressions, by which moral good or evil is known, are nothing but particular pains or pleasures; it follows, that in all enquiries concerning these moral distinctions, it will be sufficient to shew the principles, which make us feel a satisfaction or uneasiness from the survey of any character, in order to satisfy us why the character is laudable or blameable. An action, or sentiment, or character is virtuous or vicious; why? because its view causes a pleasure or uneasiness of a particular kind. In giving a reason, therefore, for the pleasure or uneasiness, we sufficiently explain the vice or virtue. To have the sense of virtue, is nothing but to *feel* a satisfaction of a particular kind from the contemplation of a character. The very *feeling* constitutes our praise or admiration. We go no farther; nor do we enquire into the cause of the satisfaction. We do not infer a character to be virtuous, because it pleases: But in feeling that it pleases after such a particular manner, we in effect feel that it is virtuous. The case is the same as in our judgments concerning all kinds of beauty, and tastes, and sensations. Our approbation is imply'd in the immediate pleasure they convey to us.

I have objected to the system, which establishes eternal rational measures of right and wrong, that 'tis impossible to shew, in the actions of reasonable creatures, any relations, which are not found in external objects; and therefore, if morality always attended these relations, 'twere possible for inanimate matter to become virtuous or vicious. Now it may, in like manner, be objected to the present system, that if virtue and vice be determin'd by pleas-

ure and pain, these qualities must, in every case, arise from the sensations; and consequently any object, whether animate or inanimate, rational or irrational, might become morally good or evil, provided it can excite a satisfaction or uneasiness. But tho' this objection seems to be the very same, it has by no means the same force, in the one case as in the other. For, *first*, 'tis evident, that under the term *pleasure*, we comprehend sensations, which are very different from each other, and which have only such a distant resemblance, as is requisite to make them be express'd by the same abstract term. A good composition of music and a bottle of good wine equally produce pleasure; and what is more, their goodness is determin'd merely by the pleasure. But shall we say upon that account, that the wine is harmonious, or the music of a good flavour? In like manner an inanimate object, and the character or sentiments of any person may, both of them, give satisfaction; but as the satisfaction is different, this keeps our sentiments concerning them from being confounded, and makes us ascribe virtue to the one, and not to the other. Nor is every sentiment of pleasure or pain, which arises from characters and actions, of that *peculiar* kind which makes us praise or condemn. The good qualities of an enemy are hurtful to us; but may still command our esteem and respect. 'Tis only when a character is considered in general, without reference to our particular interest, that it causes such a feeling or sentiment, as denominates it morally good or evil. 'Tis true, those sentiments, for interest and morals, are apt to be confounded, and naturally run into one another. It seldom happens, that we do not think an enemy vicious, and can distinguish betwixt his opposition to our interest and real villainy or baseness. But this hinders not, but that the sentiments are, in themselves, distinct; and a man of temper and judgment may preserve himself from these illusions. In like manner, tho' 'tis certain a musical voice is nothing but one that naturally gives a *particular* kind of pleasure; yet 'tis difficult for a man to be sensible, that the voice of an enemy is agreeable, or to allow it to be musical. But a person of a fine ear, who has the command of himself, can separate these feelings, and give praise to what deserves it.

Secondly, We may call to remembrance the preceding system of the passions, in order to remark a still more considerable difference among our pains and pleasures. Pride and humility, love and hatred

are excited, when there is any thing presented to us, that both bears a relation to the object of the passion, and produces a separate sensation related to the sensation of the passion. Now virtue and vice are attended with these circumstances. They must necessarily be plac'd either in ourselves or others, and excite either pleasure or uneasiness; and therefore must give rise to one of these four passions; which clearly distinguishes them from the pleasure and pain arising from inanimate objects, that often bear no relation to us: And that is, perhaps the most considerable effect that virtue and vice have upon the human mind.

It may now be ask'd *in general*, concerning this pain or pleasure, that distinguishes moral good and evil, *From what principles is it derived, and whence does it arise in the human mind?* To this I reply, *first*, that 'tis absurd to imagine, that in every particular instance, these sentiments are produc'd by an *original* quality and *primary* constitution. For as the number of our duties is, in a manner, infinite, 'tis impossible that our original instincts should extend to each of them, and from our very first infancy impress on the human mind all that multitude of precepts, which are contain'd in the compleatest system of ethics. Such a method of proceeding is not conformable to the usual maxims, by which nature is conducted, where a few principles produce all that variety we observe in the universe, and every thing is carry'd on in the easiest and most simple manner. 'Tis necessary, therefore, to abridge these primary impulses, and find some more general principles, upon which all our notions of morals are founded.

But in the *second* place, should it be ask'd, Whether we ought to search for these principles in *nature*, or whether we must look for them in some other origin? I wou'd reply, that our answer to this question depends upon the definition of the word, *Nature*, than which there is none more ambiguous and equivocal. If *nature* be oppos'd to miracles, not only the distinction betwixt vice and virtue is natural, but also every event, which has ever happen'd in the world, *excepting those miracles, on which our religion is founded*. In saying, then, that the sentiments of vice and virtue are natural in this sense, we make no very extraordinary discovery.

But *nature* may also be opposed to rare and unusual; and in this sense of the word, which is the common one, there may often arise disputes concerning what is natural or unnatural; and one

may in general affirm, that we are not possess'd of any very precise standard, by which these disputes can be decided. Frequent and rare depend upon the number of examples we have observ'd; and as this number may gradually encrease or diminish, 'twill be impossible to fix any exact boundaries betwixt them. We may only affirm on this head, that if ever there was any thing, which cou'd be call'd natural in this sense, the sentiments of morality certainly may; since there never was any nation of the world, nor any single person in any nation, who was utterly depriv'd of them, and who never, in any instance, shew'd the least approbation or dislike of manners. These sentiments are so rooted in our constitution and temper, that without entirely confounding the human mind by disease or madness, 'tis impossible to extirpate and destroy them.

But *nature* may also be opposed to artifice, as well as to what is rare and unusual; and in this sense it may be disputed, whether the notions of virtue be natural or not. We readily forget, that the designs, and projects, and views of men are principles as necessary in their operation as heat and cold, moist and dry: But taking them to be free and entirely our own, 'tis usual for us to set them in opposition to the other principles of nature. Shou'd it, therefore, be demanded, whether the sense of virtue be natural or artificial, I am of opinion, that 'tis impossible for me at present to give any precise answer to this question. Perhaps it will appear afterwards, that our sense of some virtues is artificial, and that of others natural. The discussion of this question will be more proper, when we enter upon an exact detail of each particular vice and virtue.²⁷

Mean while it may not be amiss to observe from these definitions of *natural* and *unnatural*, that nothing can be more unphilosophical than those systems, which assert, that virtue is the same with what is natural, and vice with what is unnatural. For in the first sense of the word, Nature, as opposed to miracles, both vice and virtue are equally natural; and in the second sense, as oppos'd to what is unusual, perhaps virtue will be found to be the most unnatural. At least it must be own'd, that heroic virtue, being as unusual, is as little natural as the most brutal barbarity. As to the third sense of the word, 'tis certain, that both vice and virtue are

²⁷ In the following discourse *natural* is also opposed sometimes to *moral*. The opposition will always discover the sense, in which it is taken.

equally artificial, and out of nature. For however it may be disputed, whether the notion of a merit or demerit in certain actions be natural or artificial, 'tis evident, that the actions themselves are artificial, and are perform'd with a certain design and intention; otherwise they cou'd never be rank'd under any of these denominations. 'Tis impossible, therefore, that the character of natural and unnatural can ever, in any sense, mark the boundaries of vice and virtue.

Thus we are still brought back to our first position, that virtue is distinguished by the pleasure, and vice by the pain, that any action, sentiment or character gives us by the mere view and contemplation. This decision is very commodious; because it reduces us to this simple question, *Why any action or sentiment upon the general view or survey, gives a certain satisfaction or uneasiness*, in order to shew the origin of its moral rectitude or depravity, without looking for any incomprehensible relations and qualities, which never did exist in nature, nor even in our imagination, by any clear and distinct conception. I flatter myself I have executed a great part of my present design by a statement of the question, which appears to me so free from ambiguity and obscurity.

CHAPTER III

IMMANUEL KANT

Kant was born, lived, and died in the city of Königsberg in East Prussia. He was born there in April, 1724. He entered the University in 1740 in the theological faculty but devoted a good deal of attention to natural philosophy. He probably taught privately between 1746 and 1755, when he began giving instruction in the philosophical faculty of the University as *Privatdozent*. He became professor of logic and metaphysics in 1770. The first edition of the *Critique of Pure Reason* appeared eleven years later, in 1781; the second, in 1787. The decade of preparation for this work marks the beginning of Kant's "critical period," in which, as against the physical and other scientific works of his earlier years, he began to state the central problems of philosophy as he now conceived them and to set down his own peculiar philosophical position which he felt to constitute a revolution in the history of human thought. He died in 1804. Chief "critical" works: *Critique of Pure Reason* (1781, 1787); *Prolegomena to Any Future Metaphysic* (1783); *Foundation of the Metaphysic of Morals* (1785); *Metaphysical Foundations of Natural Science* (1785); *Critique of Practical Reason* (1788); *Critique of Judgment* (1790); *Religion within the Bounds of Pure Reason* (1793); *On Eternal Peace* (1795); *Metaphysical Foundations of the Doctrine of Law and Virtue* (1797); *The Conflict of the Faculties* (1798). Suggested readings: *Critique of Judgment*, trans. Bernard (London, 1914); *Kant's Critique of Practical Reason and Other Works on the Theory of Ethics*, trans. T. K. Abbott (London, 1927); *Critique of Pure Reason*, trans. Norman Kemp Smith (London, 1927), or trans. F. Max Müller (London, 1927); *Kant's Inaugural Dissertation and Early Writings on Space*, trans. John Handypool (London, 1929); *Perpetual Peace* (New York, 1939); *Religion within the Limits of Reason Alone*, trans. T. M. Greene and H. H. Hudson (Chicago and London, 1934). Norman Clark, *An Introduction to Kant's Philosophy* (London, 1925); F. E. England, *Kant's Conception of God* (London, 1929); C. B. Garnett, *Kant's Philosophy of Space* (New York, 1939); H. J. Paton, *Kant's Metaphysics of Experience: A Commentary on the First Half of the Kritik der reinen Vernunft* (New York, 1936); Friedrich Paulsen, *Immanuel Kant* (New York, 1910); H. A. Prichard, *Kant's Theory of Knowledge* (Oxford, 1909); Henry Sidgwick, *The Philosophy of Kant* (London, 1905); Norman Kemp Smith, *A Commentary to Kant's Critique of Pure Reason* (London, 1918); W. Windelband, *History of Philosophy*, trans. J. H. Tufts (New York, 1931), Part VI, chap. i.

THE philosophy of Kant attempts to state, in the fields of science, morality, and art, fundamental principles which are uniform, permanent, and entirely valid for all mankind. In this endeavor Kant again expresses the basic faith of the period we have been studying. The turn he gives to such formulations, however (what he calls his Copernican revolution in philosophy), makes his system

even more signally an influence on succeeding philosophers than a summary of past or contemporary attitudes.

The scheme of Kant's mature philosophy is contained in three *magna opera*: the *Critique of Pure Reason* (1781), the *Critique of Practical Reason* (1788), and the *Critique of Judgment* (1790).

Like many of his predecessors' efforts, Kant's *Critique of Pure Reason* endeavors to furnish a firm philosophic basis for the conclusions of Newtonian science. The theme of the *Critique* may be understood through two main philosophic influences. After Leibniz, the German universities came to be dominated philosophically by the teachings of his disciple Wolff (1679-1754). Wolff turned into an elaborate system Leibniz's doctrine of eternal truths. Metaphysics as the science of the possible was expounded as a body of necessary truths, in which the conclusions were contained in the premises in such a way that they could be demonstrated in independence of experience. By Kant's time this system was looked on askance by many. Metaphysics, Kant says, no longer reigns supreme as she used to. Yet Kant was brought up in this tradition. Even when he came to realize the flimsiness of much of the structure, he still retained a faith in the power of human reason to come by its own force to significant conclusions. He wished, so far as intellectual honesty might permit him, to vindicate the dignity and solidity of philosophy. On the other hand, he did realize that much in the procedure of the traditional metaphysics was unsound; and he came to suspect very seriously mind's boast that it can grasp once for all the very essence of the "thing in itself." That suspicion was confirmed by a second historic influence, that of Hume.¹ At least one principle important to science as well as to first philosophy, the principle of causality, Hume had apparently proved to be neither self-evident, nor demonstrated independently of experience, nor validly

¹ For the probable sources of this influence see Norman Kemp Smith's *Commentary on the Critique*, pp. xxii ff.

established by experience. In fact, Hume showed (in agreement with Leibniz in this aspect of his doctrine) that experience never could establish with entire validity any generalization whatsoever. Now the problem created for Kant by these two predecessors is this. According to Leibniz and Wolff, there is a body of *analytic a priori judgments*; these constitute the science of metaphysics. According to such of Hume's doctrines as Kant appears to have known, there are only *synthetic a posteriori judgments*; these constitute, on strictly rational criteria, no science at all. By an analytic judgment Kant means a judgment of the form "*A* is *B*" in which the predicate *B* is already contained in and hence adds nothing to the subject *A*. By a synthetic judgment he means a judgment of the form "*A* is *B*" in which the predicate *B* is not contained in and hence does add something new to the subject *A*. By an a priori judgment Kant means a judgment made in independence of (logically prior to) experience. By an a posteriori judgment he means a judgment based on (posterior to) experience. Now not only are some of the metaphysical judgments of the Wolffians suspect; but an analytic judgment is in any case trivial, since the predicate avowedly adds nothing to the subject. Synthetic a posteriori judgments, on the other hand, have, as Hume showed, never more than probable standing. Kant agrees, however, with others nourished in the mathematical physics of the Enlightenment, that a science, to be a science, must be absolutely and universally valid on rational grounds. He is not willing without a serious effort (the effort, as he says, of at least twelve years) to relinquish the possibility of science in this sense. How is he to go between the horns of the Wolff-Hume dilemma? He, and science with him, he believes, can escape only if he discovers some judgments which are not trivial, that is, not analytic, but synthetic, and yet certain, that is, independent of experience, not a posteriori, but a priori. In the first critique, therefore, Kant asks the question: Are synthetic a priori judgments possible? Are there any

non-trivial, rationally established principles on which a necessary (in Kant's terms a pure) science can be based? Specifically, Kant is asking in turn whether such principles can be found to validate mathematics, natural science, and, finally, metaphysics.

The most significant fact about these three questions, however, is not the questions themselves or even Kant's answers to them but the broader question in terms of which they are set. We are asking whether, in the fields of mathematics, natural science, and metaphysics, a priori synthetic judgments are possible. Now the datum for this inquiry is experience as we actually have it. The question, in other words, really is: Given experience as we actually have it, are synthetic judgments prior to experience possible? But starting with experience we can establish the possibility of significant judgments prior to it only in one way—by indicating that such judgments are necessarily presupposed by the very experience we take as given. We have experience. If that experience is such that it could be just what it actually is only on the basis of certain a priori principles, then (since we do have the experience) we must, prior to it, have understood some such principles. Such proofs, which establish the possibility of synthetic a priori judgments through exhibiting them as the necessary presuppositions of experience as we have it, Kant calls *transcendental*. They form the core of his philosophic method. They get their name from the fact that they transcend, i.e., go beyond experience to the presuppositions behind it. Principles discovered by such proofs, moreover, transcend experience only to refer to it; that is, they are prior to experience in that it presupposes them, but they depend on experience in that they have meaning and validity not absolutely but only in reference to experience.

We find, then, that in asking about the possibility of a priori synthetic judgments as the basis for the sciences, we are in fact inquiring into the whole structure of man's

cognitive experience. Our answer to the narrower question will be based on the result of that broader inquiry.

But, once more, let us see in what this broader inquiry consists. We usually think of our experience as something that simply comes to us from an "external" world whether we will or no. We are the passive spectators of the cosmic show. Kant finds, however, that this experience, which we apparently receive into our consciousness from beyond it, is made possible only by a framework of a priori principles presupposed in its very reception. In other words, the show is made what it is partially by our looking at it as we do. If we looked at it differently from the way we invariably do, it would be a different show. So experience turns out to be, after all, not entirely a matter of passive reception. There is another pole, inseparable from the passive but equally indispensable, namely, the active contribution of mind. One may say, as Kant sometimes does, that the matter of experience is given but its form dictated by mind. This contrast of active and passive, formal and material, aspects of experience is, again, fundamental to Kant's procedure. In accordance with it he divides human faculties, on their cognitive side, into two main parts: "sensibility," the receptive aspect, on the one hand, as against "reason" or "reason" and "understanding," the active aspects, on the other. It is in accordance with this division that he analyzes human knowledge and incidentally answers the three methodological questions with which he began.

Let us return to the first of those questions, the possibility of the science of mathematics. Even sensibility, it turns out, that is, even the passive aspect of mind, makes a contribution of its own to experience. Space and time, the forms in which all our perceptions come clothed, are not themselves perceptions given us in particular experiences but patterns of perception in general in terms of which every particular datum is cut. They are, as Kant calls them, the a priori

forms of intuition.² Now the judgments of geometry, according to Kant, contain an essential reference to space; and the judgments of arithmetic contain an essential reference to time. Through this reference the predicates of mathematical judgments add to their subjects something not already contained in the subjects. Hence, they are synthetic judgments. But the reference that gives them this synthetic character is not, as in the case of empirical generalizations, a reference to things apprehended in experience. It is a reference to forms, space and time, necessarily involved in and hence prior to all experience. Therefore these synthetic judgments are a priori synthetic judgments, non-trivial in content yet possessing complete validity; and mathematics as a science is vindicated.

Experience, then, comes organized in spatial and temporal forms. But that is by no means the whole story. Experience comes organized—on the passive side in the forms of space and time, on the active side in a priori concepts contributed by the understanding. If we look at experience as we actually have it, we find that it necessarily presupposes such concepts as individual, substance, causality, etc. We do not arrive at such concepts by abstraction or generalization—for there never is any actual perception or act of understanding which does not already presuppose them. They are, it must be remarked, valid only *for* experience, since the proof of their possibility is a transcendental one. That is, we find that experience as given does presuppose such concepts, in so far as all experience contains them. They are therefore necessary concepts, but necessary only with reference to experience. Again, they are a priori, independent of any particular experience as their source; and yet they depend on experience in the sense that they are meaningless except in reference to it. Kant claims to establish an exhaustive set of twelve such categories. Using these, he proceeds

² Intuition (*Anschauung*) here means perception, or presentation, in the broadest sense.

to develop a priori judgments based on them. These are called the principles of the pure understanding. One of them is the principle that every event has a cause. In the proof of that principle Kant refutes Hume's "skeptical" arguments by pointing out that Hume asked the wrong question. One does not need to ask, or rather one cannot meaningfully ask, how the causal principle can be derived from experience. Without it, even the mere perception of an orderly succession of moments, which even our skeptic Hume takes for granted, would be impossible. But the principles are, again, a priori synthetic judgments. They constitute a pure natural science; so physics as a science has been vindicated.

There remains the question of that troublesome, would-be science, metaphysics. Here the transcendental method leads Kant to a negative conclusion. A priori synthetic judgments are possible, according to Kant, only in so far as actual experience necessarily presupposes them. They are therefore valid only in relation to experience. Now the very essence of metaphysics is the claim that it deals with its objects not only as they are experienced but absolutely. Metaphysics claims to deal, in other words, not with things as they appear but with things as they are in themselves or as they would be understood by an omniscient intellect. It claims to deal, in Kant's language, not with *phenomena* but with *noumena*. But a priori synthetic judgments valid absolutely, that is, for things in themselves, are constructs beyond the legitimate limits of human understanding. Pure reason, the faculty which would construct such absolute judgments, thus inevitably involves itself in several fatal errors. It errs when it pretends to prove the soul a simple and imperishable substance, or to prove that man is free, or that God exists. It errs equally when it tries to disprove these propositions. The notions in terms of which pure reason attempts its would-be proofs, the ideas of pure reason, may indeed serve fruitfully as *regulative* principles in the advancement of human knowledge. But they are not, like the categories, *con-*

stitutive for knowledge. One may, for example, use the proposition that the chain of causality is never broken (and hence that man is unfree) as a guide for one's reasonings in physics. But the causal principle in so far as it actually gives us knowledge applies only to appearances. Whether or no man as a thing-in-himself may be free it fails to tell us. As a physical principle applicable to phenomena it gives us valid knowledge. As a metaphysical principle it is either a mere limiting or guiding notion or, if taken as that knowledge of noumena, an illusion.

These statements sound very drastic. Theoretical reason can come to no positive conclusions about things in themselves. Such important doctrines as the immortality of the soul, free will, and the existence of God are incapable of proof. The moral experience of man, however, demands its own a priori principles which look rather different from the purely theoretical structure of the first critique. In the *Critique of Practical Reason*, Kant investigates the nature of man's moral faculty. We have, he says, an experience of respect for law—a law given to ourselves by ourselves, which leads us to a moral or practical insight into our natures as free agents. We cannot *know* whether we are free; but we feel within ourselves a power of moral action which would be possible only for a free and rational being. Most of our actions, it is true, are unfree or *heteronomous*. They are based on feeling, or inclination, which urges us toward certain goals, certain things we want. "If you want so-and-so," we say to ourselves, "you ought to do so-and-so." Such oughts, or imperatives, are *hypothetical* in that they depend for their origin on the particular so-and-so to which inclination happens to guide us. There is, however, one imperative which is *categorical*. That is, there is one ought which always holds—an ought which has nothing at all to do with inclination or its ends, an ought which has in fact nothing to do with any end at all but simply commands in and for itself. This *categorical imperative* tells us: "Act in such a way that the maxim of

your will may at the same time serve as a universal law." In other words, try by pure rational consideration to discover whether the particular act you are contemplating could be generalized into a law for all rational beings. Subjective feelings and objective ends are equally disregarded. Only the non-contradictoriness and hence the rationality of one's volitional maxim is to be considered. And only when we act in this fashion, solely out of respect for law, solely out of duty, with no regard to inclination, do we act *autonomously*. Only in obedience to the categorical imperative do we experience the moral certainty that we are free. Now ostensibly the motive for moral action is morality itself. But in order to assure ourselves that we may ultimately attain not only the *highest* good, moral action, but the *greatest* good, morality plus happiness, we postulate an indefinite existence in which the additional factor of happiness may be attained; and we likewise postulate a benevolent and omnipotent Deity who will see that we attain it. So Kant reintroduces in the practical sphere what was eliminated in the theoretical, not, to be sure, in contradiction, but in complement to the doctrines of the first critique.

The pure understanding gives laws for cognitive experience. Pure practical reason gives laws for moral experience. There is a third faculty, judgment, midway between understanding and intuition, which legislates for our perception of purposiveness or harmony in nature and art. In the third critique, the *Critique of Judgment*, Kant deals with the perception of beauty and sublimity (aesthetic judgment) and with the use of the concept of purposiveness in the biological sciences (teleological judgment). The beautiful according to Kant is that which gives disinterested satisfaction necessarily and universally but immediately (i.e., without mediation by concepts). It consists in the "form of the purposiveness of an object, so far as this is perceived in it without any representation of a purpose." The sublime, the second object of aesthetic judgment, is divided into two types: the mathe-

matically and the dynamically sublime. The first of these we find in nature "in those of its phenomena, whose intuition brings with it the Ideas of its infinity." The second is "nature considered in an aesthetic judgment as might that has no dominion over us." The teleological judgment, finally, is necessary to the biological sciences, in so far as we understand organized beings as "products of nature in which every part is reciprocally purpose and means."

Kant held that his critical philosophy had effected a Copernican revolution. Copernicus moved the earth around the sun instead of the sun around the earth. Kant moved things around the knower instead of the knower around things. He declared, in other words, that we must start with experience as we actually have it; and the principles we discover as its presuppositions must always return to it for validation. The revolution was perhaps not quite as thorough as Kant might have wished, but it was effective at least in the sense that philosophers since Kant have often made some parts of his doctrine or vocabulary their starting-point. As we observed in the case of Descartes, no philosophic doctrine, however revolutionary it considers itself, is likely to be wholly new. Yet the destruction of metaphysics, the distinction between phenomena and noumena, the involvements of the "transcendental" method, were matters Kantian at least in their peculiar dress which have been important, directly or indirectly, positively or negatively, in determining most philosophic movements since Kant's day.

PROLEGOMENA TO ANY FUTURE METAPHYSICS³

INTRODUCTION

These Prolegomena are destined for the use, not of pupils, but of future teachers, and even the latter should not expect that they will be serviceable for the systematic exposition of a ready-made science, but merely for the discovery of the science itself.

³ *Kant's Prolegomena to Any Future Metaphysics*, edited in English by Dr. Paul Carus (reprint ed.; Chicago: Open Court Publishing Co., 1933). By permission of the publishers. (The Appendix has been omitted here.)

There are scholarly men, to whom the history of philosophy (both ancient and modern) is philosophy itself; for these the present *Prolegomena* are not written. They must wait till those who endeavor to draw from the fountain of reason itself have completed their work; it will then be the historian's turn to inform the world of what has been done. Unfortunately, nothing can be said, which in their opinion has not been said before, and truly the same prophecy applies to all future time; for since the human reason has for many centuries speculated upon innumerable objects in various ways, it is hardly to be expected that we should not be able to discover analogies for every new idea among the old sayings of past ages.

My object is to persuade all those who think *Metaphysics* worth studying, that it is absolutely necessary to pause a moment, and, neglecting all that has been done, to propose first the preliminary question, "Whether such a thing as metaphysics be at all possible?"

If it be a science, how comes it that it cannot, like other sciences, obtain universal and permanent recognition? If not, how can it maintain its pretensions, and keep the human mind in suspense with hopes, never ceasing, yet never fulfilled? Whether then we demonstrate our knowledge or our ignorance in this field, we must come once for all to a definite conclusion respecting the nature of this so-called science, which cannot possibly remain on its present footing. It seems almost ridiculous, while every other science is continually advancing, that in this, which pretends to be Wisdom incarnate, for whose oracle every one inquires, we should constantly move round the same spot, without gaining a single step. And so its followers having melted away, we do not find men confident of their ability to shine in other sciences venturing their reputation here, where everybody, however ignorant in other matters, may deliver a final verdict, as in this domain there is as yet no standard weight and measure to distinguish sound knowledge from shallow talk.

After all it is nothing extraordinary in the elaboration of a science, when men begin to wonder how far it has advanced, that the question should at last occur, whether and how such a science is possible? Human reason so delights in constructions, that it has several times built up a tower, and then razed it to examine the nature of the foundation. It is never too late to become wise;

but if the change comes late, there is always more difficulty in starting a reform.

The question whether a science be possible, presupposes a doubt as to its actuality. But such a doubt offends the men whose whole possessions consist of this supposed jewel; hence he who raises the doubt must expect opposition from all sides. Some, in the proud consciousness of their possessions, which are ancient, and therefore considered legitimate, will take their metaphysical compendia in their hands, and look down on him with contempt; others, who never see anything except it be identical with what they have seen before, will not understand him, and everything will remain for a time, as if nothing had happened to excite the concern, or the hope, for an impending change.

Nevertheless, I venture to predict that the independent reader of these Prolegomena will not only doubt his previous science, but ultimately be fully persuaded, that it cannot exist unless the demands here stated on which its possibility depends, be satisfied; and, as this has never been done, that there is, as yet, no such thing as Metaphysics. But as it can never cease to be in demand,⁴—since the interests of common sense are intimately interwoven with it, he must confess that a radical reform, or rather a new birth of the science after an original plan, are unavoidable, however men may struggle against it for a while.

Since the Essays of Locke and Leibnitz, or rather since the origin of metaphysics so far as we know its history, nothing has ever happened which was more decisive to its fate than the attack made upon it by David Hume. He threw no light on this species of knowledge, but he certainly struck a spark from which light might have been obtained, had it caught some inflammable substance and had its smouldering fire been carefully nursed and developed.

Hume started from a single but important concept in Metaphysics, viz., that of Cause and Effect (including its derivatives force and action, etc.). He challenges reason, which pretends to have given birth to this idea from herself, to answer him by what right she thinks anything to be so constituted, that if that thing be posited, something else also must necessarily be posited; for this

⁴ Says Horace:

"Rusticus expectat, dum defluat amnis, at ille
Labitur et labetur in omne volubilis ævum."

is the meaning of the concept of cause. He demonstrated irrefutably that it was perfectly impossible for reason to think *a priori* and by means of concepts a combination involving necessity. We cannot at all see why, in consequence of the existence of one thing, another must necessarily exist, or how the concept of such a combination can arise *a priori*. Hence he inferred, that reason was altogether deluded with reference to this concept, which she erroneously considered as one of her children, whereas in reality it was nothing but a bastard of imagination, impregnated by experience, which subsumed certain representations under the Law of Association, and mistook the subject necessity of habit for an objective necessity arising from insight. Hence he inferred that reason had no power to think such combinations, even generally, because her concepts would then be purely fictitious, and all her pretended *a priori* cognitions nothing but common experiences marked with a false stamp. In plain language there is not, and cannot be, any such thing as metaphysics at all.⁵

However hasty and mistaken Hume's conclusion may appear, it was at least founded upon investigation, and this investigation deserved the concentrated attention of the brighter spirits of his day as well as determined efforts on their part to discover, if possible, a happier solution of the problem in the sense proposed by him, all of which would have speedily resulted in a complete reform of the science.

But Hume suffered the usual misfortune of metaphysicians, of not being understood. It is positively painful to see how utterly his opponents, Reid, Oswald, Beattie, and lastly Priestley, missed the point of the problem; for while they were ever taking for granted that which he doubted, and demonstrating with zeal and often with impudence that which he never thought of doubting, they so misconstrued his valuable suggestion that everything remained in its old condition, as if nothing had happened.

⁵ Nevertheless Hume called this very destructive science metaphysics and attached to it great value. Metaphysics and morals [he declares in the fourth part of his Essays] are the most important branches of science; mathematics and physics are not nearly so important. But the acute man merely regarded the negative use arising from the moderation of extravagant claims of speculative reason, and the complete settlement of the many endless and troublesome controversies that mislead mankind. He overlooked the positive injury which results, if reason be deprived of its most important prospects, which can alone supply to the will the highest aim for all its endeavor.

The question was not whether the concept of cause was right, useful, and even indispensable for our knowledge of nature, for this Hume had never doubted; but whether that concept could be thought by reason *a priori*, and consequently whether it possessed an inner truth, independent of all experience, implying a wider application than merely to the objects of experience. This was Hume's problem. It was a question concerning the *origin*, not concerning the *indispensable need* of the concept. Were the former decided, the conditions of the use and the sphere of its valid application would have been determined as a matter of course.

But to satisfy the conditions of the problem, the opponents of the great thinker should have penetrated very deeply into the nature of reason, so far as it is concerned with pure thinking,—a task which did not suit them. They found a more convenient method of being defiant without any insight, viz., the appeal to *common sense*. It is indeed a great gift of God, to possess right, or (as they now call it) plain common sense. But this common sense must be shown practically, by well-considered and reasonable thoughts and words, not by appealing to it as an oracle, when no rational justification can be advanced. To appeal to common sense, when insight and science fail, and no sooner—this is one of the subtle discoveries of modern times, by means of which the most superficial ranter can safely enter the lists with the most thorough thinker, and hold his own. But as long as a particle of insight remains, no one would think of having recourse to this subterfuge. For what is it but an appeal to the opinion of the multitude, of whose applause the philosopher is ashamed, while the popular charlatan glories and confides in it? I should think that Hume might fairly have laid as much claim to common sense as Beattie, and in addition to a critical reason (such as the latter did not possess), which keeps common sense in check and prevents it from speculating, or, if speculations are under discussion, restrains the desire to decide because it cannot satisfy itself concerning its own arguments. By this means alone can common sense remain sound. Chisels and hammers may suffice to work a piece of wood, but for steel-engraving we require an engraver's needle. Thus common sense and speculative understanding are each serviceable in their own way, the former in judgments which apply immediately to experience, the latter when we judge universally from mere concepts, as in

metaphysics, where sound common sense, so called in spite of the inapplicability of the word, has no right to judge at all.

I openly confess, the suggestion of David Hume was the very thing, which many years ago first interrupted my dogmatic slumber, and gave my investigations in the field of speculative philosophy quite a new direction. I was far from following him in the conclusions at which he arrived by regarding, not the whole of his problem, but a part, which by itself can give us no information. If we start from a well-founded, but undeveloped, thought, which another has bequeathed to us, we may well hope by continued reflection to advance farther than the acute man, to whom we owe the first spark of light.

I therefore first tried whether Hume's objection could not be put into a general form, and soon found that the concept of the connexion of cause and effect was by no means the only idea by which the understanding thinks the connexion of things *a priori*, but rather that metaphysics consists altogether of such connexions. I sought to ascertain their number, and when I had satisfactorily succeeded in this by starting from a single principle, I proceeded to the deduction of these concepts, which I was now certain were not deduced from experience, as Hume had apprehended, but sprang from the pure understanding. This deduction (which seemed impossible to my acute predecessor, which had never even occurred to any one else, though no one had hesitated to use the concepts without investigating the basis of their objective validity) was the most difficult task ever undertaken in the service of metaphysics; and the worst was that metaphysics, such as it then existed, could not assist me in the least, because this deduction alone can render metaphysics possible. But as soon as I had succeeded in solving Hume's problem not merely in a particular case, but with respect to the whole faculty of pure reason, I could proceed safely, though slowly, to determine the whole sphere of pure reason completely and from general principles, in its circumference as well as in its contents. This was required for metaphysics in order to construct its system according to a reliable method.

But I fear that the execution of Hume's problem in its widest extent (viz., my Critique of the Pure Reason) will far as the problem itself fared, when first proposed. It will be misjudged because it is misunderstood, and misunderstood because men choose to

skim through the book, and not to think through it—a disagreeable task, because the work is dry, obscure, opposed to all ordinary notions, and moreover long-winded. I confess, however, I did not expect to hear from philosophers complaints of want of popularity, entertainment, and facility, when the existence of a highly prized and indispensable cognition is at stake, which cannot be established otherwise than by the strictest rules of methodic precision. Popularity may follow, but is inadmissible at the beginning. Yet as regards a certain obscurity, arising partly from the diffuseness of the plan, owing to which the principal points of the investigation are easily lost sight of, the complaint is just, and I intend to remove it by the present *Prolegomena*.

The first-mentioned work, which discusses the pure faculty of reason in its whole compass and bounds, will remain the foundation, to which the *Prolegomena*, as a preliminary exercise, refer; for our critique must first be established as a complete and perfected science, before we can think of letting *Metaphysics* appear on the scene, or even have the most distant hope of attaining it.

We have been long accustomed to seeing antiquated knowledge produced as new by taking it out of its former context, and reducing it to system in a new suit of any fancy pattern under new titles. Most readers will set out by expecting nothing else from the *Critique*; but these *Prolegomena* may persuade him that it is a perfectly new science, of which no one has ever even thought, the very idea of which was unknown, and for which nothing hitherto accomplished can be of the smallest use, except it be the suggestion of Hume's doubts. Yet even he did not suspect such a formal science, but ran his ship ashore, for safety's sake, landing on scepticism, there to let it lie and rot; whereas my object is rather to give it a pilot, who, by means of safe astronomical principles drawn from a knowledge of the globe, and provided with a complete chart and compass, may steer the ship safely, whither he listeth.

If in a new science, which is wholly isolated and unique in its kind, we started with the prejudice that we can judge of things by means of our previously acquired knowledge, which is precisely what has first to be called in question, we should only fancy we saw everywhere what we had already known, the expressions, having a similar sound, only that all would appear utterly metamorphosed, senseless and unintelligible, because we should have as a

foundation our own notions, made by long habit a second nature, instead of the author's. But the longwindedness of the work, so far as it depends on the subject, and not the exposition, its consequent unavoidable dryness and its scholastic precision are qualities which can only benefit the science, though they may discredit the book.

Few writers are gifted with the subtilty, and at the same time with the grace, of David Hume, or with the depth, as well as the elegance, of Moses Mendelssohn. Yet I flatter myself I might have made my own exposition popular, had my object been merely to sketch out a plan and leave its completion to others, instead of having my heart in the welfare of the science, to which I had devoted myself so long; in truth, it required no little constancy, and even self-denial, to postpone the sweets of an immediate success to the prospect of a slower, but more lasting, reputation.

Making plans is often the occupation of an opulent and boastful mind, which thus obtains the reputation of a creative genius, by demanding what it cannot itself supply; by censuring, what it cannot improve; and by proposing, what it knows not where to find. And yet something more should belong to a sound plan of a general critique of pure reason than mere conjectures, if this plan is to be other than the usual declamations of pious aspirations. But pure reason is a sphere so separate and self-contained, that we cannot touch a part without affecting all the rest. We can therefore do nothing without first determining the position of each part, and its relation to the rest; for, as our judgment cannot be corrected by anything without, the validity and use of every part depends upon the relation in which it stands to all the rest within the domain of reason.

So in the structure of an organized body, the end of each member can only be deduced from the full conception of the whole. It may, then, be said of such a critique that it is never trustworthy except it be perfectly complete, down to the smallest elements of pure reason. In the sphere of this faculty you can determine either everything or nothing.

But although a mere sketch, preceding the Critique of Pure Reason, would be unintelligible, unreliable, and useless, it is all the more useful as a sequel. For so we are able to grasp the whole, to examine in detail the chief points of importance in the science,

and to improve in many respects our exposition, as compared with the first execution of the work.

After the completion of the work I offer here such a plan which is sketched out after an analytical method, while the work itself had to be executed in the synthetical style, in order that the science may present all its articulations, as the structure of a peculiar cognitive faculty, in their natural combination. But should any reader find this plan, which I publish as the Prolegomena to any future Metaphysics, still obscure, let him consider that not every one is bound to study Metaphysics, that many minds will succeed very well, in the exact and even in deep sciences, more closely allied to practical experience, (*Anschauung*) while they cannot succeed in investigations dealing exclusively with abstract concepts. In such cases men should apply their talents to other subjects. But he who undertakes to judge, or still more, to construct, a system of Metaphysics, must satisfy the demands here made, either by adopting my solution, or by thoroughly refuting it, and substituting another. To evade it is impossible.

In conclusion, let it be remembered that this much-abused obscurity (frequently serving as a mere pretext under which people hide their own indolence or dullness) has its uses, since all who in other sciences observe a judicious silence, speak authoritatively in metaphysics and make bold decisions, because their ignorance is not here contrasted with the knowledge of others. Yet it does contrast with sound critical principles, which we may therefore commend in the words of Virgil:

“Ignavum, fucos, pecus a præsepibus arcent.”

PROLEGOMENA

PREAMBLE ON THE PECULIARITIES OF ALL METAPHYSICAL COGNITION

§ 1. *Of the Sources of Metaphysics*

If it becomes desirable to formulate any cognition as science, it will be necessary first to determine accurately those peculiar features which no other science has in common with it, constituting its characteristics; otherwise the boundaries of all sciences become confused, and none of them can be treated thoroughly according to its nature.

The characteristics of a science may consist of a simple difference of object, or of the sources of cognition, or of the kind of cognition, or perhaps of all three conjointly. On this, therefore, depends the idea of a possible science and its territory.

First, as concerns the sources of metaphysical cognition, its very concept implies that they cannot be empirical. Its principles (including not only its maxims but its basic notions) must never be derived from experience. It must not be physical but metaphysical knowledge, viz., knowledge lying beyond experience. It can therefore have for its basis neither external experience, which is the source of physics proper, nor internal which is the basis of empirical psychology. It is therefore *a priori* knowledge, coming from pure Understanding and pure Reason.

But so far Metaphysics would not be distinguishable from pure Mathematics; it must therefore be called pure philosophical cognition; and for the meaning of this term I refer to the Critique of the Pure Reason (II. "Method of Transcendentalism," Chap I., Sec. i), where the distinction between these two employments of the reason is sufficiently explained. So far concerning the sources of metaphysical cognition.

§ 2. *Concerning the Kind of Cognition Which Can Alone Be Called Metaphysical*

a. Of the Distinction between Analytical and Synthetical Judgments in general.—The peculiarity of its sources demands that metaphysical cognition must consist of nothing but *a priori* judgments. But whatever be their origin, or their logical form, there is a distinction in judgments, as to their content, according to which they are either merely explicative, adding nothing to the content of the cognition, or expansive, increasing the given cognition: the former may be called analytical, the latter synthetical, judgments.

Analytical judgments express nothing in the predicate but what has been already actually thought in the concept of the subject, though not so distinctly or with the same (full) consciousness. When I say: All bodies are extended, I have not amplified in the least my concept of body, but have only analysed it, as extension was really thought to belong to that concept before the judgment was made, though it was not expressed; this judgment is therefore analytical. On the contrary, this judgment, All bodies have weight,

contains in its predicate something not actually thought in the general concept of the body; it amplifies my knowledge by adding something to my concept, and must therefore be called synthetical.

b. The Common Principle of all Analytical Judgments is the Law of Contradiction.—All analytical judgments depend wholly on the law of Contradiction, and are in their nature *a priori* cognitions, whether the concepts that supply them with matter be empirical or not. For the predicate of an affirmative analytical judgment is already contained in the concept of the subject, of which it cannot be denied without contradiction. In the same way its opposite is necessarily denied of the subject in an analytical, but negative judgment, by the same law of contradiction. Such is the nature of the judgments: all bodies are extended, and no bodies are unextended (i. e., simple).

For this very reason all analytical judgments are *a priori* even when the concepts are empirical, as, for example, Gold is a yellow metal; for to know this I require no experience beyond my concept of gold as a yellow metal: it is, in fact, the very concept, and I need only analyse it, without looking beyond it elsewhere.

c. Synthetical Judgments require a different Principle from the Law of Contradiction.—There are synthetical *a posteriori* judgments of empirical origin; but there are also others which are proved to be certain *a priori*, and which spring from pure Understanding and Reason. Yet they both agree in this, that they cannot possibly spring from the principle of analysis, viz., the law of contradiction, alone; they require a quite different principle, though, from whatever they may be deduced, they must be subject to the law of contradiction, which must never be violated, even though everything cannot be deduced from it. I shall first classify synthetical judgments.

1. *Empirical Judgments* are always synthetical. For it would be absurd to base an analytical judgment on experience, as our concept suffices for the purpose without requiring any testimony from experience. That body is extended, is a judgment established *a priori*, and not an empirical judgment. For before appealing to experience, we already have all the conditions of the judgment in the concept, from which we have but to elicit the predicate according to the law of contradiction, and thereby to become conscious

of the necessity of the judgment, which experience could not even teach us.

2. *Mathematical Judgments* are all synthetical. This fact seems hitherto to have altogether escaped the observation of those who have analysed human reason; it even seems directly opposed to all their conjectures, though incontestably certain, and most important in its consequences. For as it was found that the conclusions of mathematicians all proceed according to the law of contradiction (as is demanded by all apodeictic certainty), men persuaded themselves that the fundamental principles were known from the same law. This was a great mistake, for a synthetical proposition can indeed be comprehended according to the law of contradiction, but only by presupposing another synthetical proposition from which it follows, but never in itself.

First of all, we must observe that all proper mathematical judgments are *a priori*, and not empirical, because they carry with them necessity, which cannot be obtained from experience. But if this be not conceded to me, very good; I shall confine my assertion to *pure Mathematics*, the very notion of which implies that it contains pure *a priori* and not empirical cognitions.

It might at first be thought that the proposition $7 + 5 = 12$ is a mere analytical judgment, following from the concept of the sum of seven and five, according to the law of contradiction. But on closer examination it appears that the concept of the sum of $7 + 5$ contains merely their union in a single number, without its being at all thought what the particular number is that unites them. The concept of twelve is by no means thought by merely thinking of the combination of seven and five; and analyse this possible sum as we may, we shall not discover twelve in the concept. We must go beyond these concepts, by calling to our aid some concrete image (*Anschaung*), i.e., either our five fingers, or five points (as Segner has it in his Arithmetic), and we must add successively the units of the five, given in some concrete image (*Anschaung*), to the concept of seven. Hence our concept is really amplified by the proposition $7 + 5 = 12$, and we add to the first a second, not thought in it. Arithmetical judgments are therefore synthetical, and the more plainly according as we take larger numbers; for in such cases it is clear that, however closely we analyse our concepts

without calling visual images (*Anschauung*) to our aid, we can never find the sum by such mere dissection.

All principles of geometry are no less analytical. That a straight line is the shortest path between two points, is a synthetical proposition. For my concept of straight contains nothing of quantity, but only a quality. The attribute of shortness is therefore altogether additional, and cannot be obtained by any analysis of the concept. Here, too, visualisation (*Anschauung*) must come to aid us. It alone makes the synthesis possible.

Some other principles, assumed by geometers, are indeed actually analytical, and depend on the law of contradiction; but they only serve, as identical propositions, as a method of concatenation, and not as principles, e. g., $a = a$, the whole is equal to itself, or $a + b > a$, the whole is greater than its part. And yet even these, though they are recognised as valid from mere concepts, are only admitted in mathematics, because they can be represented in some visual form (*Anschauung*). What usually makes us believe that the predicate of such apodeictic judgments is already contained in our concept, and that the judgment is therefore analytical, is the duplicity of the expression, requesting us to think a certain predicate as of necessity implied in the thought of a given concept, which necessity attaches to the concept. But the question is not what we are requested to join in thought *to* the given concept, but what we actually think together with and in it, though obscurely; and so it appears that the predicate belongs to these concepts necessarily indeed, yet not directly but indirectly by an added visualisation (*Anschauung*).

§ 3. *A Remark on the General Division of Judgments into Analytical and Synthetical*

This division is indispensable, as concerns the Critique of human understanding, and therefore deserves to be called classical, though otherwise it is of little use, but this is the reason why dogmatic philosophers, who always seek the sources of metaphysical judgments in Metaphysics itself, and not apart from it, in the pure laws of reason generally, altogether neglected this apparently obvious distinction. Thus the celebrated Wolf, and his acute follower Baumgarten, came to seek the proof of the principle of Sufficient

Reason, which is clearly synthetical, in the principle of Contradiction. In Locke's Essay, however, I find an indication of my division. For in the fourth book (chap. iii. § 9, seq.), having discussed the various connexions of representations in judgments, and their sources, one of which he makes "identity and contradiction" (analytical judgments), and another the coexistence of representations in a subject, he confesses (§ 10) that our *a priori* knowledge of the latter is very narrow, and almost nothing. But in his remarks on this species of cognition, there is so little of what is definite, and reduced to rules, that we cannot wonder if no one, not even Hume, was led to make investigations concerning this sort of judgments. For such general and yet definite principles are not easily learned from other men, who have had them obscurely in their minds. We must hit on them first by our own reflexion, then we find them elsewhere, where we could not possibly have found them at first, because the authors themselves did not know that such an idea lay at the basis of their observations. Men who never think independently have nevertheless the acuteness to discover everything, after it has been once shown them, in what was said long since, though no one ever saw it there before.

§ 4. *The General Question of the Prolegomena—Is Metaphysics at All Possible?*

Were a metaphysics, which could maintain its place as a science, really in existence; could we say, here is metaphysics, learn it, and it will convince you irresistibly and irrevocably of its truth: this question would be useless, and there would only remain that other question (which would rather be a test of our acuteness, than a proof of the existence of the thing itself), "How is the science possible, and how does reason come to attain it?" But human reason has not been so fortunate in this case. There is no single book to which you can point as you do to Euclid, and say: This is Metaphysics; here you may find the noblest objects of this science, the knowledge of a highest Being, and of a future existence, proved from principles of pure reason. We can be shown indeed many judgments, demonstrably certain, and never questioned; but these are all analytical, and rather concern the materials and the scaffolding for Metaphysics, than the extension of knowledge, which is our

proper object in studying it (§ 2). Even supposing you produce synthetical judgments (such as the law of Sufficient Reason, which you have never proved, as you ought to, from pure reason *a priori*, though we gladly concede its truth), you lapse when they come to be employed for your principal objects, into such doubtful assertions, that in all ages one Metaphysics has contradicted another, either in its assertions, or their proofs, and thus has itself destroyed its own claim to lasting assent. Nay, the very attempts to set up such a science are the main cause of the early appearance of scepticism, a mental attitude in which reason treats itself with such violence that it could never have arisen save from complete despair of ever satisfying our most important aspirations. For long before men began to inquire into nature methodically, they consulted abstract reason, which had to some extent been exercised by means of ordinary experience; for reason is ever present, while laws of nature must usually be discovered with labor. So Metaphysics floated to the surface, like foam, which dissolved the moment it was scooped off. But immediately there appeared a new supply on the surface, to be ever eagerly gathered up by some, while others, instead of seeking in the depths the cause of the phenomenon, thought they showed their wisdom by ridiculing the idle labor of their neighbors.

The essential and distinguishing feature of pure mathematical cognition among all other *a priori* cognitions is, that it cannot at all proceed from concepts, but only by means of the construction of concepts (see Critique II., Method of Transcendentalism, chap. I., sect. 1). As therefore in its judgments it must proceed beyond the concept to that which its corresponding visualisation (*Anschauung*) contains, these judgments neither can, nor ought to, arise analytically, by dissecting the concept, but are all synthetical.

I cannot refrain from pointing out the disadvantage resulting to philosophy from the neglect of this easy and apparently insignificant observation. Hume being prompted (a task worthy of a philosopher) to cast his eye over the whole field of *a priori* cognitions in which human understanding claims such mighty possessions, heedlessly severed from it a whole, and indeed its most valuable, province, viz., pure mathematics; for he thought its nature, or, so to speak, the state-constitution of this empire, depended on totally different principles, namely, on the law of con-

tradition alone; and although he did not divide judgments in this manner formally and universally as I have done here, what he said was equivalent to this: that mathematics contains only analytical, but metaphysics synthetical, *a priori* judgments. In this, however, he was greatly mistaken, and the mistake had a decidedly injurious effect upon his whole conception. But for this, he would have extended his question concerning the origin of our synthetical judgments far beyond the metaphysical concept of Causality, and included in it the possibility of mathematics *a priori* also, for this latter he must have assumed to be equally synthetical. And then he could not have based his metaphysical judgments on mere experience without subjecting the axioms of mathematics equally to experience, a thing which he was far too acute to do. The good company into which metaphysics would thus have been brought, would have saved it from the danger of a contemptuous ill-treatment, for the thrust intended for it must have reached mathematics, which was not and could not have been Hume's intention. Thus that acute man would have been led into considerations which must needs be similar to those that now occupy us, but which would have gained inestimably by his inimitably elegant style.

Metaphysical judgments, properly so called, are all synthetical. We must distinguish judgments pertaining to metaphysics from metaphysical judgments properly so called. Many of the former are analytical, but they only afford the means for metaphysical judgments, which are the whole end of the science, and which are always synthetical. For if there be concepts pertaining to metaphysics (as, for example, that of substance), the judgments springing from simple analysis of them also pertain to metaphysics, as, for example, substance is that which only exists as subject; and by means of several such analytical judgments, we seek to approach the definition of the concept. But as the analysis of a pure concept of the understanding pertaining to metaphysics, does not proceed in any different manner from the dissection of any other, even empirical, concepts, not pertaining to metaphysics (such as: air is an elastic fluid, the elasticity of which is not destroyed by any known degree of cold), it follows that the concept indeed, but not the analytical judgment, is properly metaphysical. This science has something peculiar in the production of its *a priori* cognitions, which must therefore be distinguished from the features it has in

common with other rational knowledge. Thus the judgment, that all the substance in things is permanent, is a synthetical and properly metaphysical judgment.

If the *a priori* principles, which constitute the materials of metaphysics, have first been collected according to fixed principles, then their analysis will be of great value; it might be taught as a particular part (as a *philosophia definitiva*), containing nothing but analytical judgments pertaining to metaphysics, and could be treated separately from the synthetical which constitute metaphysics proper. For indeed these analyses are not elsewhere of much value, except in metaphysics, i. e., as regards the synthetical judgments, which are to be generated by these previously analysed concepts.

The conclusion drawn in this section then is, that metaphysics is properly concerned with synthetical propositions *a priori*, and these alone constitute its end, for which it indeed requires various dissections of its concepts, viz., of its analytical judgments, but wherein the procedure is not different from that in every other kind of knowledge, in which we merely seek to render our concepts distinct by analysis. But the generation of *a priori* cognition by concrete images as well as by concepts, in fine of synthetical propositions *a priori* in philosophical cognition, constitutes the essential subject of Metaphysics.

Weary therefore as well of dogmatism, which teaches us nothing, as of scepticism, which does not even promise us anything, not even the quiet state of a contented ignorance; disquieted by the importance of knowledge so much needed; and lastly, rendered suspicious by long experience of all knowledge which we believe we possess, or which offers itself, under the title of pure reason: there remains but one critical question on the answer to which our future procedure depends, viz., *Is Metaphysics at all possible?* But this question must be answered not by sceptical objections to the asseverations of some actual system of metaphysics (for we do not as yet admit such a thing to exist), but from the conception, as yet only problematical, of a science of this sort.

In the *Critique of Pure Reason* I have treated this question synthetically, by making inquiries into pure reason itself, and endeavoring in this source to determine the elements as well as the laws of its pure use according to principles. The task is difficult, and requires a resolute reader to penetrate by degrees into a sys-

tem, based on no data except reason itself, and which therefore seeks, without resting upon any fact, to unfold knowledge from its original germs. *Prolegomena*, however, are designed for preparatory exercises; they are intended rather to point out what we have to do in order if possible to actualise a science, than to propound it. They must therefore rest upon something already known as trustworthy, from which we can set out with confidence, and ascend to sources as yet unknown, the discovery of which will not only explain to us what we knew, but exhibit a sphere of many cognitions which all spring from the same sources. The method of *Prolegomena*, especially of those designed as a preparation for future metaphysics, is consequently analytical.

But it happens fortunately, that though we cannot assume metaphysics to be an actual science, we can say with confidence that certain pure *a priori* synthetical cognitions, pure Mathematics and pure Physics are actual and given; for both contain propositions, which are thoroughly recognised as apodeictically certain, partly by mere reason, partly by general consent arising from experience, and yet as independent of experience. We have therefore some at least uncontested synthetical knowledge *a priori*, and need not ask *whether* it be possible, for it is actual, but *how* it is possible, in order that we may deduce from the principle which makes the given cognitions possible the possibility of all the rest.

*The General Problem: How Is Cognition from Pure
Reason Possible?*

§ 5. We have above learned the significant distinction between analytical and synthetical judgments. The possibility of analytical propositions was easily comprehended, being entirely founded on the law of Contradiction. The possibility of synthetical *a posteriori* judgments, of those which are gathered from experience, also requires no particular explanation; for experience is nothing but a continual synthesis of perceptions. There remain therefore only synthetical propositions *a priori*, of which the possibility must be sought or investigated, because they must depend upon other principles than the law of contradiction.

But here we need not first establish the possibility of such propositions so as to ask whether they are possible. For there are enough

of them which indeed are of undoubted certainty, and as our present method is analytical, we shall start from the fact, that such synthetical but purely rational cognition actually exists; but we must now inquire into the reason of this possibility, and ask, *how* such cognition is possible, in order that we may from the principles of its possibility be enabled to determine the conditions of its use, its sphere and its limits. The proper problem upon which all depends, when expressed with scholastic precision, is therefore:

How are Synthetic Propositions a priori possible?

For the sake of popularity I have above expressed this problem somewhat differently, as an inquiry into purely rational cognition, which I could do for once without detriment to the desired comprehension, because, as we have only to do here with metaphysics and its sources, the reader will, I hope, after the foregoing remarks, keep in mind that when we speak of purely rational cognition, we do not mean analytical, but synthetical cognition.⁶

Metaphysics stands or falls with the solution of this problem: its very existence depends upon it. Let any one make metaphysical assertions with ever so much plausibility, let him overwhelm us with conclusions, if he has not previously proved able to answer this question satisfactorily, I have a right to say: this is all vain baseless philosophy and false wisdom. You speak through pure reason, and claim, as it were to create cognitions *a priori* by not only dissecting given concepts, but also by asserting connexions which do not rest upon the law of contradiction, and which you believe you conceive quite independently of all experience; how do you arrive at this, and how will you justify your pretensions? An

⁶ It is unavoidable that as knowledge advances, certain expressions which have become classical after having been used since the infancy of science, will be found inadequate and unsuitable, and a newer and more appropriate application of the terms will give rise to confusion. [This is the case with the term "analytical."] The analytical method, so far as it is opposed to the synthetical, is very different from that which constitutes the essence of analytical propositions: it signifies only that we start from what is sought, as if it were given, and ascend to the only conditions under which it is possible. In this method we often use nothing but synthetical propositions, as in mathematical analysis, and it were better to term it the regressive method, in contradistinction to the synthetic or progressive. A principal part of Logic too is distinguished by the name of Analytics, which here signifies the logic of truth in contrast to Dialectics, without considering whether the cognitions belonging to it are analytical or synthetical.

appeal to the consent of the common sense of mankind cannot be allowed; for that is a witness whose authority depends merely upon rumor. Says Horace:

“Quodcunque ostendis mihi sic, incredulus odi.”

The answer to this question, though indispensable, is difficult; and though the principal reason that it was not made long ago is, that the possibility of the question never occurred to anybody, there is yet another reason, which is this that a satisfactory answer to this one question requires a much more persistent, profound, and painstaking reflexion, than the most diffuse work on Metaphysics, which on its first appearance promised immortality to its author. And every intelligent reader, when he carefully reflects what this problem requires, must at first be struck with its difficulty, and would regard it as insoluble and even impossible, did there not actually exist pure synthetical cognitions *a priori*. This actually happened to David Hume, though he did not conceive the question in its entire universality as is done here, and as must be done, should the answer be decisive for all Metaphysics. For how is it possible, says that acute man, that when a concept is given me, I can go beyond it and connect with it another, which is not contained in it, in such a manner as if the latter necessarily belonged to the former? Nothing but experience can furnish us with such connexions (thus he concluded from the difficulty which he took to be an impossibility), and all that vaunted necessity, or, what is the same thing, all cognition assumed to be *a priori*, is nothing but a long habit of accepting something as true, and hence of mistaking subjective necessity for objective.

Should my reader complain of the difficulty and the trouble which I occasion him in the solution of this problem, he is at liberty to solve it himself in an easier way. Perhaps he will then feel under obligation to the person who has undertaken for him a labor of so profound research, and will rather be surprised at the facility with which, considering the nature of the subject, the solution has been attained. Yet it has cost years of work to solve the problem in its whole universality (using the term in the mathematical sense, viz., for that which is sufficient for all cases), and finally to exhibit it in the analytical form, as the reader finds it here.

All metaphysicians are therefore solemnly and legally suspended from their occupations till they shall have answered in a satisfactory manner the question, "How are synthetic cognitions *a priori* possible?" For the answer contains the only credentials which they must show when they have anything to offer in the name of pure reason. But if they do not possess these credentials, they can expect nothing else of reasonable people, who have been deceived so often, than to be dismissed without further ado.

If they on the other hand desire to carry on their business, not as a science, but as an art of wholesome oratory suited to the common sense of man, they cannot in justice be prevented. They will then speak the modest language of a rational belief, they will grant that they are not allowed even to conjecture, far less to know, anything which lies beyond the bounds of all possible experience, but only to assume (not for speculative use, which they must abandon, but for practical purposes only) the existence of something that is possible and even indispensable for the guidance of the understanding and of the will in life. In this manner alone can they be called useful and wise men, and the more so as they renounce the title of metaphysicians; for the latter profess to be speculative philosophers, and since, when judgments *a priori* are under discussion, poor probabilities cannot be admitted (for what is declared to be known *a priori* is thereby announced as necessary), such men cannot be permitted to play with conjectures, but their assertions must be either science, or are worth nothing at all.

It may be said, that the entire transcendental philosophy, which necessarily precedes all metaphysics, is nothing but the complete solution of the problem here propounded, in systematical order and completeness, and hitherto we have never had any transcendental philosophy; for what goes by its name is properly a part of metaphysics, whereas the former science is intended first to constitute the possibility of the latter, and must therefore precede all metaphysics. And it is not surprising that when a whole science, deprived of all help from other sciences, and consequently in itself quite new, is required to answer a single question satisfactorily, we should find the answer troublesome and difficult, nay even shrouded in obscurity.

As we now proceed to this solution according to the analytical

method, in which we assume that such cognitions from pure reasons actually exist, we can only appeal to two sciences of theoretical cognition (which alone is under consideration here), pure mathematics and pure natural science (physics). For these alone can exhibit to us objects in a definite and actualisable form (*in der Anschauung*), and consequently (if there should occur in them a cognition *a priori*) can show the truth or conformity of the cognition to the object *in concreto*, that is, its actuality, from which we could proceed to the reason of its possibility by the analytic method. This facilitates our work greatly for here universal considerations are not only applied to facts, but even start from them, while in a synthetic procedure they must strictly be derived *in abstracto* from concepts.

But, in order to rise from these actual and at the same time well-grounded pure cognitions *a priori* to such a possible cognition of the same as we are seeking, viz., to metaphysics as a science, we must comprehend that which occasions it, I mean the mere natural, though in spite of its truth not unsuspected, cognition *a priori* which lies at the bottom of that science, the elaboration of which without any critical investigation of its possibility is commonly called metaphysics. In a word, we must comprehend the natural conditions of such a science as a part of our inquiry, and thus the transcendental problem will be gradually answered by a division into four questions:

1. *How is pure mathematics possible?*
2. *How is pure natural science possible?*
3. *How is metaphysics in general possible?*
4. *How is metaphysics as a science possible?*

It may be seen that the solution of these problems, though chiefly designed to exhibit the essential matter of the Critique, has yet something peculiar, which for itself alone deserves attention. This is the search for the sources of given sciences in reason itself, so that its faculty of knowing something *a priori* may by its own deeds be investigated and measured. By this procedure these sciences gain, if not with regard to their contents, yet as to their proper use, and while they throw light on the higher question concerning their common origin, they give, at the same time, an occasion better to explain their own nature.

FIRST PART OF THE TRANSCENDENTAL PROBLEM

HOW IS PURE MATHEMATICS POSSIBLE?

§ 6. Here is a great and established branch of knowledge, encompassing even now a wonderfully large domain and promising an unlimited extension in the future. Yet it carries with it thoroughly apodeictical certainty, i. e., absolute necessity, which therefore rests upon no empirical grounds. Consequently it is a pure product of reason, and moreover is thoroughly synthetical. [Here the question arises:]

“How then is it possible for human reason to produce a cognition of this nature entirely *a priori*?”

Does not this faculty [which produces mathematics], as it neither is nor can be based upon experience, presuppose some ground of cognition *a priori*, which lies deeply hidden, but which might reveal itself by these its effects, if their first beginnings were but diligently ferreted out?

§ 7. But we find that all mathematical cognition has this peculiarity: it must first exhibit its concept in a visual form (*Anschauung*) and indeed *a priori*, therefore in a visual form which is not empirical, but pure. Without this mathematics cannot take a single step; hence its judgments are always visual, viz., “intuitive”; whereas philosophy must be satisfied with discursive judgments from mere concepts, and though it may illustrate its doctrines through a visual figure, can never derive them from it. This observation on the nature of mathematics gives us a clue to the first and highest condition of its possibility, which is, that some non-sensuous visualisation (called pure intuition, or *reine Anschauung*) must form its basis, in which all its concepts can be exhibited or constructed, *in concreto* and yet *a priori*. If we can find out this pure intuition and its possibility, we may thence easily explain how synthetical propositions *a priori* are possible in pure mathematics, and consequently how this science itself is possible. Empirical intuition [viz., sense-perception] enables us without difficulty to enlarge the concept which we frame of an object of intuition [or sense-perception], by new predicates, which intuition [i. e., sense-perception] itself presents synthetically in experience. Pure intuition [viz., the visualisation of forms in our imagination, from which every thing sensual, i. e., every thought of material qualities, is

excluded] does so likewise, only with this difference, that in the latter case the synthetical judgment is *a priori* certain and apodeictical, in the former, only *a posteriori* and empirically certain; because this latter contains only that which occurs in contingent empirical intuition, but the former, that which must necessarily be discovered in pure intuition. Here intuition, being an intuition *a priori*, is *before all experience*, viz., before any perception of particular objects, inseparably conjoined with its concept.

§ 8. But with this step our perplexity seems rather to increase than to lessen. For the question now is, "How is it possible to intuit [in a visual form] anything *a priori*?" An intuition [viz., a visual sense-perception] is such a representation as immediately depends upon the presence of the object. Hence it seems impossible to intuit from the outset *a priori*, because intuition would in that event take place without either a former or a present object to refer to, and by consequence could not be intuition. Concepts indeed are such, that we can easily form some of them *a priori*, viz., such as contain nothing but the thought of an object in general; and we need not find ourselves in an immediate relation to the object. Take, for instance, the concepts of Quantity, of Cause, etc. But even these require, in order to make them understood, a certain concrete use—that is, an application to some sense-experience (*Anschauung*), by which an object of them is given us. But how can the intuition of the object [its visualisation] precede the object itself?

§ 9. If our intuition [i. e., our sense-experience] were perforce of such a nature as to represent things as they are in themselves, there would not be any intuition *a priori*, but intuition would be always empirical. For I can only know what is contained in the object in itself when it is present and given to me. It is indeed even then incomprehensible how the visualising (*Anschauung*) of a present thing should make me know this thing as it is in itself, as its properties cannot migrate into my faculty of representation. But even granting this possibility, a visualising of that sort would not take place *a priori*, that is, before the object were presented to me; for without this latter fact no reason of a relation between my representation and the object can be imagined, unless it depend upon a direct inspiration. Therefore in one way only can my intuition (*Anschauung*) anticipate the actuality of the object, and be

a cognition *a priori*, viz: if my intuition contains nothing but the form of sensibility, antedating in my subjectivity all the actual impressions through which I am affected by objects. For that objects of sense can only be intuited according to this form of sensibility I can know *a priori*. Hence it follows: that propositions, which concern this form of sensuous intuition only, are possible and valid for objects of the senses; as also, conversely, that intuitions which are possible *a priori* can never concern any other things than objects of our senses.

§ 10. Accordingly, it is only the form of sensuous intuition by which we can intuit things *a priori*, but by which we can know objects only as they *appear* to us (to our senses), not as they are in themselves; and this assumption is absolutely necessary if synthetical propositions *a priori* be granted as possible, or if, in case they actually occur, their possibility is to be comprehended and determined beforehand.

Now, the intuitions which pure mathematics lays at the foundation of all its cognitions and judgments which appear at once apodeictic and necessary are Space and Time. For mathematics must first have all its concepts in intuition, and pure mathematics in pure intuition, that is, it must construct them. If it proceeded in any other way, it would be impossible to make any headway, for mathematics proceeds, not analytically by dissection of concepts, but synthetically, and if pure intuition be wanting, there is nothing in which the matter for synthetical judgments *a priori* can be given. Geometry is based upon the pure intuition of space. Arithmetic accomplishes its concept of number by the successive addition of units in time; and pure mechanics especially cannot attain its concepts of motion without employing the representation of time. Both representations, however, are only intuitions; for if we omit from the empirical intuitions of bodies and their alterations (motion) everything empirical, or belonging to sensation, space and time still remain, which are therefore pure intuitions that lie *a priori* at the basis of the empirical. Hence they can never be omitted, but at the same time, by their being pure intuitions *a priori*, they prove that they are mere forms of our sensibility, which must precede all empirical intuition, or preception of actual objects, and conformably to which objects can be known *a priori*, but only as they appear to us.

§ 11. The problem of the present section is therefore solved. Pure mathematics, as synthetical cognition *a priori*, is only possible by referring to no other objects than those of the senses. At the basis of their empirical intuition lies a pure intuition (of space and of time) which is *a priori*. This is possible, because the latter intuition is nothing but the mere form of sensibility, which precedes the actual appearance of the objects, in that it, in fact, makes them possible. Yet this faculty of intuiting *a priori* affects not the matter of the phenomenon (that is, the sense-element in it, for this constitutes that which is empirical), but its form, viz., space and time. Should any man venture to doubt that these are determinations adhering not to things in themselves, but to their relation to our sensibility, I should be glad to know how it can be possible to know the constitution of things *a priori*, viz., before we have any acquaintance with them and before they are presented to us. Such, however, is the case with space and time. But this is quite comprehensible as soon as both count for nothing more than formal conditions of our sensibility, while the objects count merely as phenomena; for then the form of the phenomenon, i. e., pure intuition, can by all means be represented as proceeding from ourselves, that is, *a priori*.

§ 12. In order to add something by way of illustration and confirmation, we need only watch the ordinary and necessary procedure of geometers. All proofs of the complete congruence of two given figures where the one can in every respect be substituted for the other) come ultimately to this that they may be made to coincide; which is evidently nothing else than a synthetical proposition resting upon immediate intuition, and this intuition must be pure, or given *a priori*, otherwise the proposition could not rank as apodeictically certain, but would have empirical certainty only. In that case, it could only be said that it is always found to be so, and holds good only as far as our perception reaches. That everywhere space (which [in-its entirety] is itself no longer the boundary of another space) has three dimensions, and that space cannot in any way have more, is based on the proposition that not more than three lines can intersect at right angles in one point; but this proposition cannot by any means be shown from concepts, but rests immediately on intuition, and indeed on pure and *a priori* intuition, because it is apodeictically certain. That we can require

a line to be drawn to infinity (*in indefinitum*), or that a series of changes (for example, spaces traversed by motion) shall be infinitely continued, presupposes a representation of space and time, which can only attach to intuition, namely, so far as it in itself is bounded by nothing, for from concepts it could never be inferred. Consequently, the basis of mathematics actually are pure intuitions, which make its synthetical and apodeictically valid propositions possible. Hence our transcendental deduction of the notions of space and of time explains at the same time the possibility of pure mathematics. Without some such deduction its truth may be granted, but its existence could by no means be understood, and we must assume "that everything which can be given to our senses (to the external senses in space, to the internal one in time) is intuited by us as it appears to us, not as it is in itself."

§ 13. Those who cannot yet rid themselves of the notion that space and time are actual qualities inhering in things in themselves, may exercise their acumen on the following paradox. When they have in vain attempted its solution, and are free from prejudices at least for a few moments, they will suspect that the degradation of space and of time to mere forms of our sensuous intuition may perhaps be well founded.

If two things are quite equal in all respects as much as can be ascertained by all means possible, quantitatively and qualitatively, it must follow, that the one can in all cases and under all circumstances replace the other, and this substitution would not occasion the least perceptible difference. This in fact is true of plane figures in geometry; but some spherical figures exhibit, notwithstanding a complete internal agreement, such a contrast in their external relation, that the one figure cannot possibly be put in the place of the other. For instance, two spherical triangles on opposite hemispheres, which have an arc of the equator as their common base, may be quite equal, both as regards sides and angles, so that nothing is to be found in either, if it be described for itself alone and completed, that would not equally be applicable to both; and yet the one cannot be put in the place of the other (being situated upon the opposite hemisphere). Here then is an internal difference between the two triangles, which difference our understanding cannot describe as internal, and which only manifests itself by external relations in space.

But I shall adduce examples, taken from common life, that are more obvious still.

What can be more similar in every respect and in every part more alike to my hand and to my ear, than their images in a mirror? And yet I cannot put such a hand as is seen in the glass in the place of its archetype; for if this is a right hand, that in the glass is a left one, and the image or reflexion of the right ear is a left one which never can serve as a substitute for the other. There are in this case no internal differences which our understanding could determine by thinking alone. Yet the differences are internal as the senses teach, for, notwithstanding their complete equality and similarity, the left hand cannot be enclosed in the same bounds as the right one (they are not congruent); the glove of one hand cannot be used for the other. What is the solution? These objects are not representations of things as they are in themselves, and as the pure understanding would cognise them, but sensuous intuitions, that is, appearances, the possibility of which rests upon the relation of certain things unknown in themselves to something else, viz., to our sensibility. Space is the form of the external intuition of this sensibility, and the internal determination of every space is only possible by the determination of its external relation to the whole space, of which it is a part (in other words, by its relation to the external sense). That is to say, the part is only possible through the whole, which is never the case with things in themselves, as objects of the mere understanding, but with appearances only. Hence the difference between similar and equal things, which are yet not congruent (for instance, two symmetric helices), cannot be made intelligible by any concept, but only by the relation to the right and the left hands which immediately refers to intuition.

REMARK I

Pure Mathematics, and especially pure geometry, can only have objective reality on condition that they refer to objects of sense. But in regard to the latter the principle holds good, that our sense representation is not a representation of things in themselves, but of the way in which they appear to us. Hence it follows, that the propositions of geometry are not the results of a mere creation of our poetic imagination, and that therefore they cannot be referred with assurance to actual objects; but rather that they are

necessarily valid of space, and consequently of all that may be found in space, because space is nothing else than the form of all external appearances, and it is this form alone in which objects of sense can be given. Sensibility, the form of which is the basis of geometry, is that upon which the possibility of external appearance depends. Therefore these appearances can never contain anything but what geometry prescribes to them.

It would be quite otherwise if the senses were so constituted as to represent objects as they are in themselves. For then it would not by any means follow from the conception of space, which with all its properties serves to the geometer as an *a priori* foundation, together with what is thence inferred, must be so in nature. The space of the geometer would be considered a mere fiction, and it would not be credited with objective validity, because we cannot see how things must of necessity agree with an image of them, which we make spontaneously and previous to our acquaintance with them. But if this image, or rather this formal intuition, is the essential property of our sensibility, by means of which alone objects are given to us, and if this sensibility represents not things in themselves, but their appearances: we shall easily comprehend, and at the same time indisputably prove, that all external objects of our world of sense must necessarily coincide in the most rigorous way with the propositions of geometry; because sensibility by means of its form of external intuition, viz., by space, the same with which the geometer is occupied, makes those objects at all possible as mere appearances.

It will always remain a remarkable phenomenon in the history of philosophy, that there was a time, when even mathematicians, who at the same time were philosophers, began to doubt, not of the accuracy of their geometrical propositions so far as they concerned space, but of their objective validity and the applicability of this concept itself, and of all its corollaries, to nature. They showed much concern whether a line in nature might not consist of physical points, and consequently that true space in the object might consist of simple [discrete] parts, while the space which the geometer has in his mind [being continuous] cannot be such. They did not recognise that this mental space renders possible the physical space, i. e., the extension of matter; that this pure space is not at all a quality of things in themselves, but a form of our sensuous faculty

of representation; and that all objects in space are mere appearances, i. e., not things in themselves but representations of our sensuous intuition. But such is the case, for the space of the geometer is exactly the form of sensuous intuition which we find *a priori* in us, and contains the ground of the possibility of all external appearances (according to their form), and the latter must necessarily and most rigidly agree with the propositions of the geometer, which he draws not from any fictitious concept, but from the subjective basis of all external phenomena, which is sensibility itself. In this and no other way can geometry be made secure as to the undoubted objective reality of its propositions against all the intrigues of a shallow Metaphysics, which is surprised at them [the geometrical propositions], because it has not traced them to the sources of their concepts.

REMARK II

Whatever is given us as object, must be given us in intuition. All our intuition however takes place by means of the senses only; the understanding intuits nothing, but only reflects. And as we have just shown that the senses never and in no manner enable us to know things in themselves, but only their appearances, which are mere representations of the sensibility, we conclude that "all bodies, together with the space in which they are, must be considered nothing but mere representations in us, and exist nowhere but in our thoughts." You will say: Is not this manifest idealism?

Idealism consists in the assertion, that there are none but thinking beings, all other things, which we think are perceived in intuition, being nothing but representations in the thinking beings, to which no object external to them corresponds in fact. Whereas I say, that things as objects of our senses existing outside us are given, but we know nothing of what they may be in themselves, knowing only their appearances, i. e., the representations which they cause in us by affecting our senses. Consequently I grant by all means that there are bodies without us, that is, things which, though quite unknown to us as to what they are in themselves, we yet know by the representations which their influence on our sensibility procures us, and which we call bodies, a term signifying merely the appearance of the thing which is unknown to us, but not

therefore less actual. Can this be termed idealism? It is the very contrary.

Long before Locke's time, but assuredly since him, it has been generally assumed and granted without detriment to the actual existence of external things, that many of their predicates may be said to belong not to the things in themselves, but to their appearances, and to have no proper existence outside our representation. Heat, color, and taste, for instance, are of this kind. Now, if I go farther, and for weighty reasons rank as mere appearances the remaining qualities of bodies also, which are called primary, such as extension, place, and in general space, with all that which belongs to it (impenetrability or materiality, space, etc.)—no one in the least can adduce the reason of its being inadmissible. As little as the man who admits colors not to be properties of the object in itself, but only as modifications of the sense of sight, should on that account be called an idealist, so little can my system be named idealistic, merely because I find that more, nay,

All the properties which constitute the intuition of a body belong merely to its appearance.

The existence of the thing that appears is thereby not destroyed, as in genuine idealism, but it is only shown, that we cannot possibly know it by the senses as it is in itself.

I should be glad to know what my assertions must be in order to avoid all idealism. Undoubtedly, I should say, that the representation of space is not only perfectly conformable to the relation which our sensibility has to objects—that I have said—but that it is quite similar to the object,—an assertion in which I can find as little meaning as if I said that the sensation of red has a similarity to the property of vermilion, which in me excites this sensation.

REMARK III

Hence we may at once dismiss an easily foreseen but futile objection, "that by admitting the ideality of space and of time the whole sensible world would be turned into mere sham." At first all philosophical insight into the nature of sensuous cognition was spoiled, by making the sensibility merely a confused mode of representation, according to which we still know things as they are, but without being able to reduce everything in this our representation to a clear consciousness; whereas proof is offered by us that sensi-

bility consists, not in this logical distinction of clearness and obscurity, but in the genetical one of the origin of cognition itself. For sensuous perception represents things not at all as they are, but only the mode in which they affect our senses, and consequently by sensuous perception appearances only and not things themselves are given to the understanding for reflexion. After this necessary corrective, an objection rises from an unpardonable and almost intentional misconception, as if my doctrine turned all the things of the world of sense into mere illusion.

When an appearance is given us, we are still quite free as to how we should judge the matter. The appearance depends upon the senses, but the judgment upon the understanding, and the only question is, whether in the determination of the object there is truth or not. But the difference between truth and dreaming is not ascertained by the nature of the representations, which are referred to objects (for they are the same in both cases), but by their connexion according to those rules, which determine the coherence of the representations in the concept of an object, and by ascertaining whether they can subsist together in experience or not. And it is not the fault of the appearances if our cognition takes illusion for truth, i. e., if the intuition, by which an object is given us, is considered a concept of the thing or of its existence also, which the understanding can only think. The senses represent to us the paths of the planets as now progressive, now retrogressive, and herein is neither falsehood nor truth, because as long as we hold this path to be nothing but appearance, we do not judge of the objective nature of their motion. But as a false judgment may easily arise when the understanding is not on its guard against this subjective mode of representation being considered objective, we say they appear to move backward; it is not the senses however which must be charged with the illusion, but the understanding, whose province alone it is to give an objective judgment on appearances.

Thus, even if we did not at all reflect on the origin of our representations, whenever we connect our intuitions of sense (whatever they may contain), in space and in time, according to the rules of the coherence of all cognition in experience, illusion or truth will arise according as we are negligent or careful. It is merely a question of the use of sensuous representations in the understanding, and not of their origin. In the same way, if I consider all

the representations of the senses, together with their form, space and time, to be nothing but appearances, and space and time to be a mere form of the sensibility, which is not to be met with in objects out of it, and if I make use of these representations in reference to possible experience only, there is nothing in my regarding them as appearances that can lead astray or cause illusion. For all that they can correctly cohere according to rules of truth in experience. Thus all the propositions of geometry hold good of space as well as of all the objects of the senses, consequently of all possible experience, whether I consider space as a mere form of the sensibility, or as something cleaving to the things themselves. In the former case however I comprehend how I can know *a priori* these propositions concerning all the objects of external intuition. Otherwise, everything else as regards all possible experience remains just as if I had not departed from the vulgar view.

But if I venture to go beyond all possible experience with my notions of space and time, which I cannot refrain from doing if I proclaim them qualities inherent in things in themselves (for what should prevent me from letting them hold good of the same things, even though my senses might be different, and unsuited to them?), then a grave error may arise due to illusion, for thus I would proclaim to be universally valid what is merely a subjective condition of the intuition of things and sure only for all objects of sense, viz., for all possible experience; I would refer this condition to things in themselves, and do not limit it to the conditions of experience.

My doctrine of the ideality of space and of time, therefore, far from reducing the whole sensible world to mere illusion, is the only means of securing the application of one of the most important cognitions (that which mathematics propounds *a priori*) to actual objects, and of preventing its being regarded as mere illusion. For without this observation it would be quite impossible to make out whether the intuitions of space and time, which we borrow from no experience, and which yet lie in our representation *a priori*, are not mere phantasms of our brain, to which objects do not correspond, at least not adequately, and consequently, whether we have been able to show its unquestionable validity with regard to all the objects of the sensible world just because they are mere appearances.

Secondly, though these my principles make appearances of the representations of the senses, they are so far from turning the truth of experience into mere illusion, that they are rather the only means of preventing the transcendental illusion, by which metaphysics has hitherto been deceived, leading to the childish endeavor of catching at bubbles, because appearances, which are mere representations, were taken for things in themselves. Here originated the remarkable event of the antimony of Reason which I shall mention by and by, and which is destroyed by the single observation, that appearance, as long as it is employed in experience, produces truth, but the moment it transgresses the bounds of experience, and consequently becomes transcendent, produces nothing but illusion.

Inasmuch, therefore, as I leave to things as we obtain them by the senses their actuality, and only limit our sensuous intuition of these things to this, that they represent in no respect, not even in the pure intuitions of space and of time, anything more than mere appearance of those things, but never their constitution in themselves, this is not a sweeping illusion invented for nature by me. My protestation too against all charges of idealism is so valid and clear as even to seem superfluous, were there not incompetent judges, who, while they would have an old name for every deviation from their perverse though common opinion, and never judge of the spirit of philosophic nomenclature, but cling to the letter only, are ready to put their own conceits in the place of well-defined notions, and thereby deform and distort them. I have myself given this my theory the name of transcendental idealism, but that cannot authorise any one to confound it either with the empirical idealism of Descartes, (indeed, his was only an insoluble problem, owing to which he thought every one at liberty to deny the existence of the corporeal world, because it could never be proved satisfactorily), or with the mystical and visionary idealism of Berkeley, against which and other similar phantasms our Critique contains the proper antidote. My idealism concerns not the existence of things (the doubting of which, however, constitutes idealism in the ordinary sense), since it never came into my head to doubt it, but it concerns the sensuous representation of things, to which space and time especially belong. Of these [*viz.*, space and time], consequently of all appearances in general, I have only shown, that they are neither things (but mere modes of representation), nor determinations be-

longing to things in themselves. But the word "transcendental," which with me means a reference of our cognition, i. e., not to things, but only to the cognitive faculty, was meant to obviate this misconception. Yet rather than give further occasion to it by this word, I now retract it, and desire this idealism of mine to be called critical. But if it be really an objectionable idealism to convert actual things (not appearances) into mere representations, by what name shall we call him who conversely changes mere representations to things? It may, I think, be called "dreaming idealism," in contradistinction to the former, which may be called "visionary," both of which are to be refuted by my transcendental, or, better, critical idealism.

SECOND PART OF THE TRANSCENDENTAL PROBLEM

HOW IS THE SCIENCE OF NATURE POSSIBLE?

§ 14. Nature is the existence of things, so far as it is determined according to universal laws. Should nature signify the existence of things in themselves, we could never cognise it either *a priori* or *a posteriori*. Not *a priori*, for how can we know what belongs to things in themselves, since this never can be done by the dissection of our concepts (in analytical judgments)? We do not want to know what is contained in our concept of a thing (for the [concept describes what] belongs to its logical being), but what is in the actuality of the thing superadded to our concept, and by what the thing itself is determined in its existence outside the concept. Our understanding, and the conditions on which alone it can connect the determinations of things in their existence, do not prescribe any rule to things themselves; these do not conform to our understanding, but it must conform itself to them; they must therefore be first given us in order to gather these determinations from them, wherefore they would not be cognised *a priori*.

A cognition of the nature of things in themselves *a posteriori* would be equally impossible. For, if experience is to teach us laws, to which the existence of things is subject, these laws, if they regard things in themselves, must belong to them of necessity even outside our experience. But experience teaches us what exists and how it exists, but never that it must necessarily exist so and not

otherwise. Experience therefore can never teach us the nature of things in themselves.

§ 15. We nevertheless actually possess a pure science of nature in which are propounded, *a priori* and with all the necessity requisite to apodeictical propositions, laws to which nature is subject. I need only call to witness that propædæutic of natural science which, under the title of the universal Science of Nature, precedes all Physics (which is founded upon empirical principles). In it we have Mathematics applied to appearance, and also merely discursive principles (or those derived from concepts), which constitute the philosophical part of the pure cognition of nature. But there are several things in it, which are not quite pure and independent of empirical sources: such as the concept of *motion*, that of *impenetrability* (upon which the empirical concept of matter rests), that of *inertia*, and many others, which prevent its being called a perfectly pure science of nature. Besides, it only refers to objects of the external sense, and therefore does not give an example of a universal science of nature, in the strict sense, for such a science must reduce nature in general, whether it regards the object of the external or that of the internal sense (the object of Physics as well as Psychology), to universal laws. But among the principles of this universal physics there are a few which actually have the required universality; for instance, the propositions that "substance is permanent," and that "every event is determined by a cause according to constant laws," etc. These are actually universal laws of nature, which subsist completely *a priori*. There is then in fact a pure science of nature, and the question arises, *How is it possible?*

§ 16. The word "nature" assumes yet another meaning, which determines the object, whereas in the former sense it only denotes the conformity to law [*Gesetzmässigkeit*] of the determinations of the existence of things generally. If we consider it *materialiter* (i. e., in the matter that forms its objects) "nature is the complex of all the objects of experience." And with this only are we now concerned, for besides, things which can never be objects of experience, if they must be cognised as to their nature, would oblige us to have recourse to concepts whose meaning could never be given *in concreto* (by any example of possible experience). Consequently we must form for ourselves a list of concepts of their

nature, the reality whereof (i.e., whether they actually refer to objects, or are mere creations of thought) could never be determined. The cognition of what cannot be an object of experience would be hyperphysical, and with things hyperphysical we are here not concerned, but only with the cognition of nature, the actuality of which can be confirmed by experience, though it [the cognition of nature] is possible *a priori* and precedes all experience.

§ 17. The formal [aspect] of nature in this narrower sense is therefore the conformity to law of all the objects of experience, and so far as it is cognised *a priori*, their necessary conformity. But it has just been shown that the laws of nature can never be cognised *a priori* in objects so far as they are considered not in reference to possible experience, but as things in themselves. And our inquiry here extends not to things in themselves (the properties of which we pass by), but to things as objects of possible experience, and the complex of these is what we properly designate as nature. And now I ask, when the possibility of a cognition of nature *a priori* is in question, whether it is better to arrange the problem thus: How can we cognise *a priori* that things as objects of experience necessarily conform to law? or thus: How is it possible to cognise *a priori* the necessary conformity to law of experience itself as regards all its objects generally?

Closely considered, the solution of the problem, represented in either way, amounts, with regard to the pure cognition of nature (which is the point of the question at issue), entirely to the same thing. For the subjective laws, under which alone an empirical cognition of things is possible, hold good of these things, as objects of possible experience (not as things in themselves, which are not considered here). Either of the following statements means quite the same:

A judgment of observation can never rank as experience, without the law, that "whenever an event is observed, it is always referred to some antecedent, which it follows according to a universal rule."

"Everything, of which experience teaches that it happens, must have a cause."

It is, however, more commendable to choose the first formula. For we can *a priori* and previous to all given objects have a cognition of those conditions, on which alone experience is possible, but never of the laws to which things may in themselves be subject,

without reference to possible experience. We cannot therefore study the nature of things *a priori* otherwise than by investigating the conditions and the universal (though subjective) laws, under which alone such a cognition as experience (as to mere form) is possible, and we determine accordingly the possibility of things, as objects of experience. For if I should choose the second formula, and seek the conditions *a priori*, on which nature as an object of experience is possible, I might easily fall into error, and fancy that I was speaking of nature as a thing in itself, and then move round in endless circles, in a vain search for laws concerning things of which nothing is given me.

Accordingly we shall here be concerned with experience only, and the universal conditions of its possibility which are given *a priori*. Thence we shall determine nature as the whole object of all possible experience. I think it will be understood that I here do not mean the rules of the observation of a nature that is already given, for these already presuppose experience. I do not mean how (through experience) we can study the laws of nature; for these would not then be laws *a priori*, and would yield us no pure science of nature; but [I mean to ask] how the conditions *a priori* of the possibility of experience are at the same time the sources from which all the universal laws of nature must be derived.

§ 18. In the first place we must state that, while all judgments of experience (*Erfahrungsurtheile*) are empirical (i.e., have their ground in immediate sense-perception), *vice versa*, all empirical judgments (*empirische Urtheile*) are not judgments of experience, but, besides the empirical, and in general besides what is given to the sensuous intuition, particular concepts must yet be superadded—concepts which have their origin quite *a priori* in the pure understanding, and under which every perception must be first of all subsumed and then by their means changed into experience.

Empirical judgments, so far as they have objective validity, are **judgments of experience**; but those which are only subjectively valid, I name mere **judgments of perception**. The latter require no pure concept of the understanding, but only the logical connexion of perception in a thinking subject. But the former always require, besides the representation of the sensuous intuition, particular *concepts originally begotten in the understanding*, which produce the objective validity of the judgment of experience.

All our judgments are at first merely judgments of perception; they hold good only for us (i. e., for our subject), and we do not till afterwards give them a new reference (to an object), and desire that they shall always hold good for us and in the same way for everybody else; for when a judgment agrees with an object, all judgments concerning the same object must likewise agree among themselves, and thus the objective validity of the judgment of experience signifies nothing else than its necessary universality of application. And conversely when we have reason to consider a judgment necessarily universal (which never depends upon perception, but upon the pure concept of the understanding, under which the perception is subsumed), we must consider it objective also, that is, that it expresses not merely a reference of our perception to a subject, but a quality of the object. For there would be no reason for the judgments of other men necessarily agreeing with mine, if it were not the unity of the object to which they all refer, and with which they accord; hence they must all agree with one another.

§ 19. Therefore objective validity and necessary universality (for everybody) are equivalent terms, and though we do not know the object in itself, yet when we consider a judgment as universal, and also necessary, we understand it to have objective validity. By this judgment we cognise the object (though it remains unknown as it is in itself) by the universal and necessary connexion of the given perceptions. As this is the case with all objects of sense, judgments of experience take their objective validity not from the immediate cognition of the object (which is impossible), but from the condition of universal validity in empirical judgments, which, as already said, never rests upon empirical, or, in short, sensuous conditions, but upon a pure concept of the understanding. The object always remains unknown in itself; but when by the concept of the understanding the connexion of the representations of the object, which are given to our sensibility, is determined as universally valid, the object is determined by this relation, and it is the judgment that is objective.

To illustrate the matter: When we say, "the room is warm, sugar sweet, and wormwood bitter,"⁷—we have only subjectively valid

⁷ I freely grant that these examples do not represent such judgments of perception as ever could become judgments of experience, even though a concept of the understanding were superadded, because they refer merely to feeling, which every-

judgments. I do not at all expect that I or any other person shall always find it as I now do; each of these sentences only expresses a relation of two sensations to the same subject, to myself, and that only in my present state of perception; consequently they are not valid of the object. Such are judgments of perception. Judgments of experience are of quite a different nature. What experience teaches me under certain circumstances, it must always teach me and everybody; and its validity is not limited to the subject nor to its state at a particular time. Hence I pronounce all such judgments as being objectively valid. For instance, when I say the air is elastic, this judgment is as yet a judgment of perception only—I do nothing but refer two of my sensations to one another. But, if I would have it called a judgment of experience, I require this connexion to stand under a condition, which makes it universally valid. I desire therefore that I and everybody else should always connect necessarily the same perceptions under the same circumstances.

§ 20. We must consequently analyse experience in order to see what is contained in this product of the senses and of the understanding, and how the judgment of experience itself is possible. The foundation is the intuition of which I become conscious, i. e., perception (*perceptio*), which pertains merely to the senses. But in the next place, there are acts of judging (which belong only to the understanding). But this judgment may be twofold—first, I may merely compare perceptions and connect them in a particular state of my consciousness; or, secondly, I may connect them in consciousness generally. The former judgment is merely a judgment of perception, and of subjective validity only: it is merely a connexion of perceptions in my mental state, without reference to the object. Hence it is not, as is commonly imagined, enough for experience to compare perceptions and to connect them in consciousness through judgment; there arises no universality and necessity, for which alone judgments can become objectively valid and be called experience.

body knows to be merely subjective, and which of course can never be attributed to the object, and consequently never become objective. I only wished to give here an example of a judgment that is merely subjectively valid, containing no ground for universal validity, and thereby for a relation to the object. An example of the judgments of perception, which become judgments of experience by superadded concepts of the understanding, will be given in the next note.

Quite another judgment therefore is required before perception can become experience. The given intuition must be subsumed under a concept, which determines the form of judging in general relatively to the intuition, connects its empirical consciousness in consciousness generally, and thereby procures universal validity for empirical judgments. A concept of this nature is a pure *a priori* concept of the Understanding, which does nothing but determine for an intuition the general way in which it can be used for judgments. Let the concept be that of cause, then it determines the intuition which is subsumed under it, e. g., that of air, relative to judgments in general, viz., the concept of air serves with regard to its expansion in the relation of antecedent to consequent in a hypothetical judgment. The concept of cause accordingly is a pure concept of the understanding, which is totally disparate from all possible perception, and only serves to determine the representation subsumed under it, relatively to judgments in general, and so to make a universally valid judgment possible.

Before, therefore, a judgment of perception can become a judgment of experience, it is requisite that the perception should be subsumed under some such a concept of the understanding; for instance, air ranks under the concept of causes, which determines our judgment about it in regard to its expansion as hypothetical.⁸ Thereby the expansion of the air is represented not as merely belonging to the perception of the air in my present state or in several states of mine, or in the state of perception of others, but as belonging to it necessarily. The judgment, "the air is elastic," becomes universally valid, and a judgment of experience, only by certain judgments preceding it, which subsume the intuition of air under the concept of cause and effect: and they thereby determine the perceptions not merely as regards one another in me, but relatively

⁸ As an easier example, we may take the following: "When the sun shines on the stone, it grows warm." This judgment, however often I and others may have perceived it, is a mere judgment of perception, and contains no necessity; perceptions are only usually conjoined in this manner. But if I say, "The sun warms the stone," I add to the perception a concept of the understanding, viz., that of cause, which connects with the concept of sunshine that of heat as a necessary consequence, and the synthetical judgment becomes of necessity universally valid, viz., objective, and is converted from a perception into experience.

to the form of judging in general, which is here hypothetical, and in this way they render the empirical judgment universally valid.

If all our synthetical judgments are analysed so far as they are objectively valid, it will be found that they never consist of mere intuitions connected only (as is commonly believed) by comparison into a judgment; but that they would be impossible were not a pure concept of the understanding superadded to the concepts abstracted from intuition, under which concept these latter are subsumed, and in this manner only combined into an objectively valid judgment. Even the judgments of pure mathematics in their simplest axioms are not exempt from this condition. The principle, "a straight line is the shortest between two points," presupposes that the line is subsumed under the concept of quantity, which certainly is no mere intuition, but has its seat in the understanding alone, and serves to determine the intuition (of the line) with regard to the judgments which may be made about it, relatively to their quantity, that is, to plurality (as *judicia plurativa*).⁹ For under them it is understood that in a given intuition there is contained a plurality of homogeneous parts.

§ 21. To prove, then, the possibility of experience so far as it rests upon pure concepts of the understanding *a priori*, we must first represent what belongs to judgments in general and the various functions of the understanding, in a complete table. For the pure concepts of the understanding must run parallel to these functions, as such concepts are nothing more than concepts of intuitions in general, so far as these are determined by one or other of these functions of judging, in themselves, that is, necessarily and universally. Hereby also the *a priori* principles of the possibility of all experience, as of an objectively valid empirical cognition, will be precisely determined. For they are nothing but propositions by which all perception is (under certain universal conditions of intuition) subsumed under those pure concepts of the understanding.

⁹ This name seems preferable to the term *particularia*, which is used for these judgments in logic. For the latter implies the idea that they are not universal. But when I start from unity (in single judgments) and so proceed to universality, I must not [even indirectly and negatively] imply any reference to universality. I think plurality merely without universality, and not the exception from universality. This is necessary, if logical considerations shall form the basis of the pure concepts of the understanding. However, there is no need of making changes in logic.

Logical Table of Judgments

1	2
<i>As to Quantity</i>	<i>As to Quality</i>
Universal	Affirmative
Particular	Negative
Singular	Infinite
3	4
<i>As to Relation</i>	<i>As to Modality</i>
Categorical	Problematical
Hypothetical	Assertorical
Disjunctive	Apodeictical

Transcendental Table of the Pure Concepts of the Understanding

1	2
<i>As to Quantity</i>	<i>As to Quality</i>
Unity (the Measure)	Reality
Plurality (the Quantity)	Negation
Totality (the Whole)	Limitation
3	4
<i>As to Relation</i>	<i>As to Modality</i>
Substance	Possibility
Cause	Existence
Community	Necessity

Pure Physiological Table of the Universal Principles of the Science of Nature

1	2
Axioms of Intuition	Anticipations of Perception
3	4
Analogies of Experience	Postulates of Empirical Thinking generally

§ 21*a*. In order to comprise the whole matter in one idea, it is first necessary to remind the reader that we are discussing not the origin of experience, but of that which lies in experience. The former pertains to empirical psychology, and would even then never be adequately explained without the latter, which belongs to the Critique of cognition, and particularly of the understanding.

Experience consists of intuitions, which belong to the sensibility, and of judgments, which are entirely a work of the understanding. But the judgments, which the understanding forms alone from sensuous intuitions, are far from being judgments of experience. For in the one case the judgment connects only the perceptions as they are given in the sensuous intuition, while in the other the judgments must express what experience in general, and not what the mere perception (which possesses only subjective validity) contains. The judgment of experience must therefore add to the sensuous intuition and its logical connexion in a judgment (after it has been rendered universal by comparison) something that determines the synthetical judgment as necessary and therefore as universally valid. This can be nothing else than that concept which represents the intuition as determined in itself with regard to one form of judgment rather than another, viz., a concept of that synthetical unity of intuitions which can only be represented by a given logical function of judgments.

§ 22. The sum of the matter is this: the business of the senses is to intuite—that of the understanding is to think. But thinking is uniting representations in one consciousness. This union originates either merely relative to the subject, and is accidental and subjective, or is absolute, and is necessary or objective. The union of representations in one consciousness is judgment. Thinking therefore is the same as judging, or referring representations to judgments in general. Hence judgments are either merely subjective, when representations are referred to a consciousness in one subject only, and united in it, or objective, when they are united in a consciousness generally, that is, necessarily. The logical functions of all judgments are but various modes of uniting representations in consciousness. But if they serve for concepts, they are concepts of their necessary union in a consciousness, and so principles of objectively valid judgments. This union in a consciousness is either analytical, by identity, or synthetical, by the combination and addition of various representations one to another. Experience consists in the synthetical connexion of phenomena (perceptions) in consciousness, so far as this connexion is necessary. Hence the pure concepts of the understanding are those under which all perceptions must be subsumed ere they can serve for judgments of experience,

in which the synthetical unity of the perceptions is represented as necessary and universally valid.¹⁰

§ 23. Judgments, when considered merely as the condition of the union of given representations in a consciousness, are rules. These rules, so far as they represent the union as necessary, are rules *a priori*, and so far as they cannot be deduced from higher rules, are fundamental principles. But in regard to the possibility of all experience, merely in relation to the form of thinking in it, no conditions of judgments of experience are higher than those which bring the phenomena, according to the various form of their intuition, under pure concepts of the understanding, and render the empirical judgment objectively valid. These are therefore the *a priori* principles of possible experience.

The principles of possible experience are then at the same time universal laws of nature, which can be cognised *a priori*. And thus the problem in our second question, "How is the pure Science of Nature possible?" is solved. For the system which is required for the form of a science is to be met with in perfection here, because, beyond the above-mentioned formal conditions of all judgments in general offered in logic, no others are possible, and these constitute a logical system. The concepts grounded thereupon, which contain the *a priori* conditions of all synthetical and necessary judgments, accordingly constitute a transcendental system. Finally the principles, by means of which all phenomena are subsumed under these concepts, constitute a physical system, that is, a system of nature, which precedes all empirical cognition of nature, makes it even possible, and hence may in strictness be denominated the universal and pure science of nature.

¹⁰ But how does this proposition, "that judgments of experience contain necessity in the synthesis of perceptions," agree with my statement so often before inculcated, that "experience as cognition *a posteriori* can afford contingent judgments only?" When I say that experience teaches me something, I mean only the perception that lies in experience,—for example, that heat always follows the shining of the sun on a stone; consequently the proposition of experience is always so far accidental. That this heat necessarily follows the shining of the sun is contained indeed in the judgment of experience (by means of the concept of cause), yet is a fact not learned by experience; for conversely, experience is first of all generated by this addition of the concept of the understanding (of cause) to perception. How perception attains this addition may be seen by referring in the *Critique* itself to the section on the Transcendental faculty of Judgment [viz., in the first edition, *Von dem Schematismus der reinen Verstandsbegriffe*].

§ 24. The first one¹¹ of the physiological principles subsumes all phenomena, as intuitions in space and time, under the concept of Quantity, and is so far a principle of the application of Mathematics to experience. The second one subsumes the empirical element, viz., sensation, which denotes the real in intuitions, not indeed directly under the concept of quantity, because sensation is not an intuition that contains either space or time, though it places the respective object into both. But still there is between reality (sense-representation) and the zero, or total void of intuition in time, a difference which has a quantity. For between every given degree of light and of darkness, between every degree of heat and of absolute cold, between every degree of weight and of absolute lightness, between every degree of occupied space and of totally void space, diminishing degrees can be conceived, in the same manner as between consciousness and total unconsciousness (the darkness of a psychological blank) ever diminishing degrees obtain. Hence there is no perception that can prove an absolute absence of it; for instance, no psychological darkness that cannot be considered as a kind of consciousness, which is only outbalanced by a stronger consciousness. This occurs in all cases of sensation, and so the understanding can anticipate even sensations, which constitute the peculiar quality of empirical representations (appearances), by means of the principle: "that they all have (consequently that what is real in all phenomena has) a degree." Here is the second application of mathematics (*mathesis intensorum*) to the science of nature.

§ 25. Anent the relation of appearances merely with a view to their existence, the determination is not mathematical but dynamical, and can never be objectively valid, consequently never fit for experience, if it does not come under *a priori* principles by which the cognition of experience relative to appearances becomes even possible. Hence appearances must be subsumed under the concept of Substance, which is the foundation of all determination of existence, as a concept of the thing itself; or secondly—so far as a succession is found among phenomena, that is, an event—under the concept of an Effect with reference to Cause; or lastly—so far as coexistence is

¹¹ The three following paragraphs will hardly be understood unless reference be made to what the *Critique* itself says on the subject of the Principles; they will, however, be of service in giving a general view of the Principles, and in fixing the attention on the main points.

to be known objectively, that is, by a judgment of experience—under the concept of Community (action and reaction: *Wechselwirkung*). Thus *a priori* principles form the basis of objectively valid, though empirical judgments, that is, of the possibility of experience so far as it must connect objects as existing in nature. These principles are the proper laws of nature, which may be termed dynamical.

Finally the cognition of the agreement and connexion not only of appearances among themselves in experience, but of their relation to experience in general, belongs to the judgments of experience. This relation contains either their agreement with the formal conditions, which the understanding cognises, or their coherence with the materials of the senses and of perception, or combines both into one concept. Consequently it contains Possibility, Actuality, and Necessity according to universal laws of nature; and this constitutes the physical doctrine of method, or the distinction of truth and of hypotheses, and the bounds of the certainty of the latter.

§ 26. The third table of Principles drawn from the nature of the understanding itself after the critical method, shows an inherent perfection, which raises it far above every other table which has hitherto though in vain been tried or may yet be tried by analysing the objects themselves dogmatically. It exhibits all synthetical *a priori* principles completely and according to one principle, viz., the faculty of judging in general, constituting the essence of experience as regards the understanding, so that we can be certain that there are no more such principles, which affords a satisfaction such as can never be attained by the dogmatical method. Yet is this not all: there is a still greater merit in it.

We must carefully bear in mind the proof which shows the possibility of this cognition *a priori*, and at the same time limits all such principles to a condition which must never be lost sight of, if we desire it not to be misunderstood, and extended in use beyond the original sense which the understanding attaches to it. This limit is that they contain nothing but the conditions of possible experience in general so far as it is subjected to laws *a priori*. Consequently I do not say, that things *in themselves* possess a quantity, that their actuality possesses a degree, their existence a connexion of accidents in a substance, etc. This nobody can prove, because such a synthetical connexion from mere concepts, without any reference to

sensuous intuition on the one side, or connexion of it in a possible experience on the other, is absolutely impossible. The essential limitation of the concepts in these principles then is: That all things stand necessarily *a priori* under the afore-mentioned conditions, as objects of experience only.

Hence there follows secondly a specifically peculiar mode of proof of these principles: they are not directly referred to appearances and to their relations, but to the possibility of experience, of which appearances constitute the matter only, not the form. Thus they are referred to objectively and universally valid synthetical propositions, in which we distinguish judgments of experience from those of perception. This takes place because appearances, as mere intuitions, occupying a part of space and time, come under the concept of Quantity, which unites their multiplicity *a priori* according to rules synthetically. Again, so far as the perception contains, besides intuition, sensibility, and between the latter and nothing (i.e., the total disappearance of sensibility), there is an ever-decreasing transition, it is apparent that that which is in appearances must have a degree, so far as it (viz., the perception) does not itself occupy any part of space or of time.¹² Still the transition to actuality from empty time or empty space is only possible in time; consequently though sensibility, as the quality of empirical intuition, can never be cognised *a priori*, by its specific difference from other sensibilities, yet it can, in a possible experience in general, as a quantity of perception be intensely distinguished from every other similar perception. Hence the application of mathematics to nature, as regards the sensuous intuition by which nature is given to us, becomes possible and is thus determined.

Above all, the reader must pay attention to the mode of proof of the principles which occur under the title of Analogies of experience.

¹² Heat and light are in a small space just as large as to degree as in a large one; in like manner the internal representations, pain, consciousness in general, whether they last a short or a long time, need not vary as to the degree. Hence the quantity is here in a point and in a moment just as great as in any space or time however great. Degrees are therefore capable of increase, but not in intuition, rather in mere sensation (or the quantity of the degree of an intuition). Hence they can only be estimated quantitatively by the relation of 1 to 0, viz., by their capability of decreasing by infinite intermediate degrees to disappearance, or of increasing from naught through infinite gradations to a determinate sensation in a certain time. *Quantitas qualitatis est gradus* [i. e., the degrees of quality must be measured by quality].

For these do not refer to the genesis of intuitions, as do the principles of applied mathematics, but to the connexion of their existence in experience; and this can be nothing but the determination of their existence in time according to necessary laws, under which alone the connexion is objectively valid, and thus becomes experience. The proof therefore does not turn on the synthetical unity in the connexion of things in themselves, but merely of perceptions, and of these not in regard to their matter, but to the determination of time and of the relation of their existence in it, according to universal laws. If the empirical determination in relative times is indeed objectively valid (i. e., experience), these universal laws contain the necessary determination of existence in time generally (viz., according to a rule of the understanding *a priori*).

In these Prolegomena I cannot further descant on the subject, but my reader (who has probably been long accustomed to consider experience a mere empirical synthesis of perceptions, and hence not considered that it goes much beyond them, as it imparts to empirical judgments universal validity, and for that purpose requires a pure and *a priori* unity of the understanding) is recommended to pay special attention to this distinction of experience from a mere aggregate of perceptions, and to judge the mode of proof from this point of view.

§ 27. Now we are prepared to remove Hume's doubt. He justly maintains, that we cannot comprehend by reason the possibility of Causality, that is, of the reference of the existence of one thing to the existence of another, which is necessitated by the former. I add, that we comprehend just as little the concept of Subsistence, that is, the necessity that at the foundation of the existence of things there lies a subject which cannot itself be a predicate of any other thing; nay, we cannot even form a notion of the possibility of such a thing (though we can point out examples of its use in experience). The very same incomprehensibility affects the Community of things, as we cannot comprehend how from the state of one thing an inference to the state of quite another thing beyond it, and *vice versa*, can be drawn, and how substances which have each their own separate existence should depend upon one another necessarily. But I am very far from holding these concepts to be derived merely from experience, and the necessity represented in them, to be imaginary and a mere illusion produced in us by long habit. On the contrary, I

have amply shown, that they and the theorems derived from them are firmly established *a priori*, or before all experience, and have their undoubted objective value, though only with regard to experience.

§ 28. Though I have no notion of such a connexion of things in themselves, that they can either exist as substances, or act as causes, or stand in community with others (as parts of a real whole), and I can just as little conceive such properties in appearances as such (because those concepts contain nothing that lies in the appearances, but only what the understanding alone must think): we have yet a notion of such a connexion of representations in our understanding, and in judgments generally; consisting in this that representations appear in one sort of judgments as subject in relation to predicates, in another as reason in relation to consequences, and in a third as parts, which constitute together a total possible cognition. Besides we cognise *a priori* that without considering the representation of an object as determined in some of these respects, we can have no valid cognition of the object, and, if we should occupy ourselves about the object in itself, there is no possible attribute, by which I could know that it is determined under any of these aspects, that is, under the concept either of substance, or of cause, or (in relation to other substances) of community, for I have no notion of the possibility of such a connexion of existence. But the question is not how things in themselves, but how the empirical cognition of things is determined, as regards the above aspects of judgments in general, that is, how things, as objects of experience, can and shall be subsumed under these concepts of the understanding. And then it is clear, that I completely comprehend not only the possibility, but also the necessity of subsuming all phenomena under these concepts, that is, of using them for principles of the possibility of experience.

§ 29. When making an experiment with Hume's problematical concept (his *crux metaphysicorum*), the concept of cause, we have, in the first place, given *a priori*, by means of logic, the form of a conditional judgment in general, i. e., we have one given cognition as antecedent and another as consequence. But it is possible, that in perception we may meet with a rule of relation, which runs thus: that a certain phenomenon is constantly followed by another (though not conversely), and this is a case for me to use the hypo-

thetical judgment, and, for instance, to say, if the sun shines long enough upon a body, it grows warm. Here there is indeed as yet no necessity of connexion, or concept of cause. But I proceed and say, that if this proposition, which is merely a subjective connexion of perceptions, is to be a judgment of experience, it must be considered as necessary and universally valid. Such a proposition would be, "the sun is by its light the cause of heat." The empirical rule is now considered as a law, and as valid not merely of appearances but valid of them for the purposes of a possible experience which requires universal and therefore necessarily valid rules. I therefore easily comprehend the concept of cause, as a concept necessarily belonging to the mere form of experience, and its possibility as a synthetical union of perceptions in consciousness generally; but I do not at all comprehend the possibility of a thing generally as a cause, because the concept of cause denotes a condition not at all belonging to things, but to experience. It is nothing in fact but an objectively valid cognition of appearances and of their succession, so far as the antecedent can be conjoined with the consequent according to the rule of hypothetical judgments.

§ 30. Hence if the pure concepts of the understanding do not refer to objects of experience but to things in themselves (*noumena*), they have no signification whatever. They serve, as it were, only to decipher appearances, that we may be able to read them as experience. The principles which arise from their reference to the sensible world, only serve our understanding for empirical use. Beyond this they are arbitrary combinations, without objective reality, and we can neither cognise their possibility *a priori*, nor verify their reference to objects, let alone make it intelligible by any example; because examples can only be borrowed from some possible experience, consequently the objects of these concepts can be found nowhere but in a possible experience.

This complete (though to its originator unexpected) solution of Hume's problem rescues for the pure concepts of the understanding their *a priori* origin, and for the universal laws of nature their validity, as laws of the understanding, yet in such a way as to limit their use to experience, because their possibility depends solely on the reference of the understanding to experience, but with a completely reversed mode of connexion which never occurred to Hume, not by

deriving them from experience, but by deriving experience from them.

This is therefore the result of all our foregoing inquiries: "All synthetical principles *a priori* are nothing more than principles of possible experience, and can never be referred to things in themselves, but to appearances as objects of experience. And hence pure mathematics as well as a pure science of nature can never be referred to anything more than mere appearances, and can only represent either that which makes experience generally possible, or else that which, as it is derived from these principles, must always be capable of being represented in some possible experience."

§ 31. And thus we have at last something definite, upon which to depend in all metaphysical enterprises, which have hitherto, boldly enough but always at random, attempted everything without discrimination. That the aim of their exertions should be so near, struck neither the dogmatical thinkers nor those who, confident in their supposed sound common sense, started with concepts and principles of pure reason (which were legitimate and natural, but destined for mere empirical use) in quest of fields of knowledge, to which they neither knew nor could know any determinate bounds, because they had never reflected nor were able to reflect on the nature or even on the possibility of such a pure understanding.

Many a naturalist of pure reason (by which I mean the man who believes he can decide in matters of metaphysics without any science) may pretend, that he long ago by the prophetic spirit of his sound sense, not only suspected, but knew and comprehended, what is here propounded with so much ado, or, if he likes, with prolix and pedantic pomp: "that with all our reason we can never reach beyond the field of experience." But when he is questioned about his rational principles individually, he must grant, that there are many of them which he has not taken from experience, and which are therefore independent of it and valid *a priori*. How then and on what grounds will he restrain both himself and the dogmatist, who makes use of these concepts and principles beyond all possible experience, because they are recognised to be independent of it? And even he, this adept in sound sense, in spite of all his assumed and cheaply acquired wisdom, is not exempt from wandering inadvertently beyond objects of experience into the field of chimeras. He is often deeply enough involved in them, though in announcing every-

thing as mere probability, rational conjecture, or analogy, he gives by his popular language a color to his groundless pretensions.

§ 32. Since the oldest days of philosophy inquirers into pure reason have conceived, besides the things of sense, or appearances (phenomena), which make up the sensible world, certain creations of the understanding (*Verstandeswesen*), called noumena, which should constitute an intelligible world. And as appearance and illusion were by those men identified (a thing which we may well excuse in an undeveloped epoch), actuality was only conceded to the creations of thought.

And we indeed, rightly considering objects of sense as mere appearances, confess thereby that they are based upon a thing in itself, though we know not this thing in its internal constitution, but only know its appearances, viz., the way in which our senses are affected by this unknown something. The understanding therefore, by assuming appearances, grants the existence of things in themselves also, and so far we may say, that the representation of such things as form the basis of phenomena, consequently of mere creations of the understanding, is not only admissible, but unavoidable.

Our critical deduction by no means excludes things of that sort (noumena), but rather limits the principles of the Aesthetic (the science of the sensibility) to this, that they shall not extend to all things, as everything would then be turned into mere appearance, but that they shall only hold good of objects of possible experience. Hereby then objects of the understanding are granted, but with the inculcation of this rule which admits of no exception: "that we neither know nor can know anything at all definite of these pure objects of the understanding, because our pure concepts of the understanding as well as our pure intuitions extend to nothing but objects of possible experience, consequently to mere things of sense, and as soon as we leave this sphere these concepts retain no meaning whatever."

§ 33. There is indeed something seductive in our pure concepts of the understanding, which tempts us to a transcendent use,—a use which transcends all possible experience. Not only are our concepts of substance, of power, of action, of reality, and others, quite independent of experience, containing nothing of sense appearance, and so apparently applicable to things in themselves (noumena), but, what strengthens this conjecture, they contain a necessity of

determination in themselves, which experience never attains. The concept of cause implies a rule, according to which one state follows another necessarily; but experience can only show us, that one state of things often, or at most, commonly, follows another, and therefore affords neither strict universality, nor necessity.

Hence the Categories seem to have a deeper meaning and import than can be exhausted by their empirical use, and so the understanding inadvertently adds for itself to the house of experience a much more extensive wing, which it fills with nothing but creatures of thought, without ever observing that it has transgressed with its otherwise lawful concepts the bounds of their use.

§ 34. Two important, and even indispensable, though very dry, investigations had therefore become indispensable in the Critique of Pure Reason,—viz., the two chapters “Vom Schematismus der reinen Verstandsbegriffe,” and “Vom Grunde der Unterscheidung aller Verstandesbegriffe überhaupt in Phänomena und Noumena.” In the former it is shown, that the senses furnish not the pure concepts of the understanding *in concreto*, but only the schedule for their use, and that the object conformable to it occurs only in experience (as the product of the understanding from materials of the sensibility). In the latter it is shown, that, although our pure concepts of the understanding and our principles are independent of experience, and despite of the apparently greater sphere of their use, still nothing whatever can be thought by them beyond the field of experience, because they can do nothing but merely determine the logical form of the judgment relatively to given intuitions. But as there is no intuition at all beyond the field of the sensibility, these pure concepts, as they cannot possibly be exhibited *in concreto*, are void of all meaning; consequently all these noumena, together with their complex, the intelligible world,¹³ are nothing but representation of a problem, of which the object in itself is possible, but the solution, from the nature of our understanding, totally impossible.

¹³ We speak of the “intelligible world,” not (as the usual expression is) “intellectual world.” For cognitions are intellectual through the understanding, and refer to our world of sense also; but objects, so far as they can be represented merely by the understanding, and to which none of our sensible intuitions can refer, are termed “intelligible.” But as some possible intuition must correspond to every object, we would have to assume an understanding that intuits things immediately; but of such we have not the least notion, nor have we of the *things of the understanding* [*Verstandeswesen*], to which it should be applied.

For our understanding is not a faculty of intuition, but of the connexion of given intuitions in experience. Experience must therefore contain all the objects for our concepts; but beyond it no concepts have any significance, as there is no intuition that might offer them a foundation.

§ 35. The imagination may perhaps be forgiven for occasional vagaries, and for not keeping carefully within the limits of experience, since it gains life and vigor by such flights, and since it is always easier to moderate its boldness, than to stimulate its languor. But the understanding which ought to *think* can never be forgiven for indulging in vagaries; for we depend upon it alone for assistance to set bounds, when necessary, to the vagaries of the imagination.

But the understanding begins its aberrations very innocently and modestly. It first elucidates the elementary cognitions, which inhere in it prior to all experience, but yet must always have their application in experience. It gradually drops these limits, and what is there to prevent it, as it has quite freely derived its principles from itself? And then it proceeds first to newly-imagined powers in nature, then to beings outside nature; in short to a world, for whose construction the materials cannot be wanting, because fertile fiction furnishes them abundantly, and though not confirmed, is never refuted, by experience. This is the reason that young thinkers are so partial to metaphysics of the truly dogmatical kind, and often sacrifice to it their time and their talents, which might be otherwise better employed.

But there is no use in trying to moderate these fruitless endeavors of pure reason by all manner of cautions as to the difficulties of solving questions so occult, by complaints of the limits of our reason, and by degrading our assertions into mere conjectures. For if their impossibility is not distinctly shown, and reason's cognition of its own essence does not become a true science, in which the field of its right use is distinguished, so to say, with mathematical certainty from that of its worthless and idle use, these fruitless efforts will never be abandoned for good.

§ 36. *How is Nature itself possible?*—This question—the highest point that transcendental philosophy can ever reach, and to which, as its boundary and completion, it must proceed—properly contains two questions.

FIRST: How is nature at all possible in the material sense, by

intuition, considered as the totality of appearances; how are space, time, and that which fills both—the object of sensation, in general possible? The answer is: By means of the constitution of our Sensibility, according to which it is specifically affected by objects, which are in themselves unknown to it, and totally distinct from those phenomena. This answer is given in the *Critique* itself in the transcendental Aesthetic, and in these *Prolegomena* by the solution of the first general problem.

SECONDLY: How is nature possible in the formal sense, as the totality of the rules, under which all phenomena must come, in order to be thought as connected in experience? The answer must be this: It is only possible by means of the constitution of our Understanding, according to which all the above representations of the sensibility are necessarily referred to a consciousness, and by which the peculiar way in which we think (viz., by rules), and hence experience also, are possible but must be clearly distinguished from an insight into the objects in themselves. This answer is given in the *Critique* itself in the transcendental Logic, and in these *Prolegomena*, in the course of the solution of the second main problem.

But how this peculiar property of our sensibility itself is possible, or that of our understanding and of the apperception which is necessarily its basis and that of all thinking, cannot be further analysed or answered, because it is of them that we are in need for all our answers and for all our thinking about objects.

There are many laws of nature, which we can only know by means of experience; but conformity to law in the connexion of appearances, i.e., in nature in general, we cannot discover by any experience, because experience itself requires laws which are *a priori* at the basis of its possibility.

The possibility of experience in general is therefore at the same time the universal law of nature, and the principles of the experience are the very laws of nature. For we do not know nature but as the totality of appearances, i.e., of representations in us, and hence we can only derive the laws of its connexion from the principles of their connexion in us, that is, from the conditions of their necessary union in consciousness, which constitutes the possibility of experience.

Even the main proposition expounded throughout this section—that universal laws of nature can be distinctly cognised *a priori*—

leads naturally to the proposition: that the highest legislation of nature must lie in ourselves, i.e., in our understanding, and that we must not seek the universal laws of nature in nature by means of experience, but conversely must seek nature, as to its universal conformity to law, in the conditions of the possibility of experience, which lie in our sensibility and in our understanding. For how were it otherwise possible to know *a priori* these laws, as they are not rules of analytical cognition, but truly synthetical extensions of it?

Such a necessary agreement of the principles of possible experience with the laws of the possibility of nature, can only proceed from one of two reasons: either these laws are drawn from nature by means of experience, or conversely nature is derived from the laws of the possibility of experience in general, and is quite the same as the mere universal conformity to law of the latter. The former is self-contradictory, for the universal laws of nature can and must be cognised *a priori* (that is, independent of all experience), and be the foundation of all empirical use of the understanding; the latter alternative therefore alone remains.¹⁴

But we must distinguish the empirical laws of nature, which always presuppose particular perceptions, from the pure or universal laws of nature, which, without being based on particular perceptions, contain merely the conditions of their necessary union in experience. In relation to the latter, nature and possible experience are quite the same, and as the conformity to law here depends upon the necessary connexion of appearances in experience (without which we cannot cognise any object whatever in the sensible world), consequently upon the original laws of the understanding, it seems at first strange, but is not the less certain, to say:

The understanding does not derive its laws (a priori) from, but prescribes them to, nature.

§ 37. We shall illustrate this seemingly bold proposition by an example, which will show, that laws, which we discover in objects of

¹⁴ Crusius alone thought of a compromise: that a Spirit, who can neither err nor deceive, implanted these laws in us originally. But since false principles often intrude themselves, as indeed the very system of this man shows in not a few examples, we are involved in difficulties as to the use of such a principle in the absence of sure criteria to distinguish the genuine origin from the spurious, as we never can know certainly what the Spirit of truth or the father of lies may have instilled into us.

sensuous intuition (especially when these laws are cognised as necessary), are commonly held by us to be such as have been placed there by the understanding, in spite of their being similar in all points to the laws of nature, which we ascribe to experience.

§ 38. If we consider the properties of the circle, by which this figure combines so many arbitrary determinations of space in itself, at once in a universal rule, we cannot avoid attributing a constitution (*eine Natur*) to this geometrical thing. Two right lines, for example, which intersect one another and the circle, howsoever they may be drawn, are always divided so that the rectangle constructed with the segments of the one is equal to that constructed with the segments of the other. The question now is: Does this law lie in the circle or in the understanding, that is, Does this figure, independently of the understanding, contain in itself the ground of the law, or does the understanding, having constructed according to its concepts (according to the quality of the radii) the figure itself, introduce into it this law of the chords cutting one another in geometrical proportion? When we follow the proofs of this law, we soon perceive, that it can only be derived from the condition on which the understanding founds the construction of this figure, and which is that of the quality of the radii. But, if we enlarge this concept, to pursue further the unity of various properties of geometrical figures under common laws, and consider the circle as a conic section, which of course is subject to the same fundamental conditions of construction as other conic sections, we shall find that all the chords which intersect within the ellipse, parabola, and hyperbola, always intersect so that the rectangles of their segments are not indeed equal, but always bear a constant ratio to one another. If we proceed still farther, to the fundamental laws of physical astronomy, we find a physical law of reciprocal attraction diffused over all material nature, the rule of which is: "that it decreases inversely as the square of the distance from each attracting point, i.e., as the spherical surfaces increase, over which this force spreads," which law seems to be necessarily inherent in the very nature of things, and hence is usually propounded as cognisable *a priori*. Simple as the sources of this law are, merely resting upon the relation of spherical surfaces of different radii, its consequences are so valuable with regard to the variety of their agreement and its regu-

larity, that not only are all possible orbits of the celestial bodies conic sections, but such a relation of these orbits to each other results, that no other law of attraction, than that of the inverse square of the distance, can be imagined as fit for a cosmical system.

Here accordingly is a nature that rests upon laws which the understanding cognises *a priori*, and chiefly from the universal principles of the determination of space. Now I ask:

Do the laws of nature lie in space, and does the understanding learn them by merely endeavoring to find out the enormous wealth of meaning that lies in space; or do they inhere in the understanding and in the way in which it determines space according to the conditions of the synthetical unity in which its concepts are all centred?

Space is something so uniform and as to all particular properties so indeterminate, that we should certainly not seek a store of laws of nature in it. Whereas that which determines space to assume the form of a circle or the figures of a cone and a sphere, is the understanding, so far as it contains the ground of the unity of their constructions.

The mere universal form of intuition, called space, must therefore be the substratum of all intuitions determinable to particular objects, and in it of course the condition of the possibility and of the variety of these intuitions lies. But the unity of the objects is entirely determined by the understanding, and on conditions which lie in its own nature; and thus the understanding is the origin of the universal order of nature, in that it comprehends all appearances under its own laws, and thereby first constructs, *a priori*, experience (as to its form), by means of which whatever is to be cognised only by experience, is necessarily subjected to its laws. For we are not now concerned with the nature of things in themselves, which is independent of the conditions both of our sensibility and our understanding, but with nature, as an object of possible experience, and in this case the understanding, whilst it makes experience possible, thereby insists that the sensuous world is either not an object of experience at all, or must be nature [viz., an existence of things, determined according to universal laws].¹⁵

¹⁵ The definition of nature is given in the beginning of the Second Part of the "Transcendental Problem," in § 14.

APPENDIX TO THE PURE SCIENCE OF NATURE

§ 39. *Of the System of the Categories.*—There can be nothing more desirable to a philosopher, than to be able to derive the scattered multiplicity of the concepts or the principles, which had occurred to him in concrete use, from a principle *a priori*, and to unite everything in this way in one cognition. He formerly only believed that those things, which remained after a certain abstraction, and seemed by comparison among one another to constitute a particular kind of cognitions, were completely collected; but this was only an Aggregate. Now he knows, that just so many, neither more nor less, can constitute the mode of cognition, and perceives the necessity of his division, which constitutes comprehension; and now only he has attained a *System*.

To search in our daily cognition for the concepts, which do not rest upon particular experience, and yet occur in all cognition of experience, where they as it were constitute the mere form of connexion, presupposes neither greater reflexion nor deeper insight, than to detect in a language the rules of the actual use of words generally, and thus to collect elements for a grammar. In fact both researches are very nearly related, even though we are not able to give a reason why each language has just this and no other formal constitution, and still less why an exact number of such formal determinations in general are found in it.

Aristotle collected ten pure elementary concepts under the name of Categories.¹⁶ To these, which are also called predicaments, he found himself obliged afterwards to add five post-predicaments,¹⁷ some of which however (*prius*, *simul*, and *motus*) are contained in the former; but this random collection must be considered (and commended) as a mere hint for future inquirers, not as a regularly developed idea, and hence it has, in the present more advanced state of philosophy, been rejected as quite useless.

After long reflexion on the pure elements of human knowledge (those which contain nothing empirical), I at last succeeded in distinguishing with certainty and in separating the pure elementary

¹⁶ 1. *Substantia*. 2. *Qualitas*. 3. *Quantitas*. 4. *Relatio*. 5. *Actio*. 6. *Passio*. 7. *Quando*. 8. *Ubi*. 9. *Situs*. 10. *Habitus*.

¹⁷ *Oppositum*. *Prius*. *Simul*. *Motus*. *Habere*.

notions of the Sensibility (space and time) from those of the Understanding. Thus the 7th, 8th, and 9th Categories had to be excluded from the old list. And the others were of no service to me; because there was no principle [in them], on which the understanding could be investigated, measured in its completion, and all the functions, whence its pure concepts arise, determined exhaustively and with precision.

But in order to discover such a principle, I looked about for an act of the understanding which comprises all the rest, and is distinguished only by various modifications or phases, in reducing the multiplicity of representation to the unity of thinking in general: I found this act of the understanding to consist in judging. Here then the labors of the logicians were ready at hand, though not yet quite free from defects, and with this help I was enabled to exhibit a complete table of the pure functions of the understanding, which are however undertermined in regard to any object. I finally referred these functions of judging to objects in general, or rather to the condition of determining judgments as objectively valid, and so there arose the pure concepts of the understanding, concerning which I could make certain, that these, and this exact number only, constitute our whole cognition of things from pure understanding. I was justified in calling them by their old name, *Categories*, while I reserved for myself the liberty of adding, under the title of "Predicables," a complete list of all the concepts deducible from them, by combinations whether among themselves, or with the pure form of the appearance, i.e., space or time, or with its matter, so far as it is not yet empirically determined (viz., the object of sensation in general), as soon as a system of transcendental philosophy should be completed with the construction of which I am engaged in the *Critique of Pure Reason* itself.

Now the essential point in this system of Categories, which distinguishes it from the old rhapsodical collection without any principle, and for which alone it deserves to be considered as philosophy, consists in this: that by means of it the true significance of the pure concepts of the understanding and the condition of their use could be precisely determined. For here it became obvious that they are themselves nothing but logical functions, and as such do not produce the least concept of an object, but require some sensuous intuition as a basis. They therefore only serve to determine

empirical judgments, which are otherwise undetermined and indifferently as regards all functions of judging, relatively to these functions, thereby procuring them universal validity, and by means of them making judgments of experience in general possible.

Such an insight into the nature of the categories, which limits them at the same time to the mere use of experience, never occurred either to their first author, or to any of his successors; but without this insight (which immediately depends upon their derivation or deduction), they are quite useless and only a miserable list of names, without explanation or rule for their use. Had the ancients ever conceived such a notion, doubtless the whole study of the pure rational knowledge, which under the name of metaphysics has for centuries spoiled many a sound mind, would have reached us in quite another shape, and would have enlightened the human understanding, instead of actually exhausting it in obscure and vain speculations, thereby rendering it unfit for true science.

This system of categories makes all treatment of every object of pure reason itself systematic, and affords a direction or clue how and through what points of inquiry every metaphysical consideration must proceed, in order to be complete; for it exhausts all the possible movements (*momenta*) of the understanding, among which every concept must be classed. In like manner the table of Principles has been formulated, the completeness of which we can only vouch for by the system of the categories. Even in the division of the concepts,¹⁸ which must go beyond the physical application of the understanding, it is always the very same clue, which, as it must always be determined *a priori* by the same fixed points of the human understanding, always forms a closed circle. There is no doubt that the object of a pure conception either of the understanding or of reason, so far as it is to be estimated philosophically and on *a priori* principles, can in this way be completely cognised. I could not therefore omit to make use of this clue with regard to one of the most abstract ontological divisions, viz., the various distinctions of "the notions of something and of nothing," and to construct accord-

¹⁸ See the two tables in the chapters *Von den Paralogismen der reinen Vernunft* and the first division of the Antinomy of Pure Reason, *System der kosmologischen Ideen*.

ingly (*Critique*, p. 207) a regular and necessary table of their divisions.¹⁹

And this system, like every other true one founded on a universal principle, shows its inestimable value in this, that it excludes all foreign concepts, which might otherwise intrude among the pure concepts of the understanding, and determines the place of every cognition. Those concepts, which under the name of "concepts of reflexion" have been likewise arranged in a table according to the clue of the categories, intrude, without having any privilege or title to be among the pure concepts of the understanding in Ontology. They are concepts of connexion, and thereby of the objects themselves, whereas the former are only concepts of a mere comparison of concepts already given, hence of quite another nature and use. By my systematic division²⁰ they are saved from this confusion. But the value of my special table of the categories will be still more obvious, when we separate the table of the transcendental concepts of Reason from the concepts of the understanding. The latter being of quite another nature and origin, they must have quite another form than the former. This so necessary separation has never yet been made in any system of metaphysics for, as a rule, these rational concepts all mixed up with the categories, like children of one family, which confusion was unavoidable in the absence of a definite system of categories.

¹⁹ On the table of the categories many neat observations may be made, for instance: (1) that the third arises from the first and the second joined in one concept; (2) that in those of Quantity and of Quality there is merely a progress from unity to totality or from something to nothing (for this purpose the categories of Quality must stand thus: reality, limitation, total negation), without *correlata* or *opposita*, whereas those of Relation and of Modality have them; (3) that, as in *Logic* categorical judgments are the basis of all others, so the category of Substance is the basis of all concepts of actual things; (4) that as Modality in the judgment is not a particular predicate, so by the modal concepts a determination is not superadded to things, etc., etc. Such observations are of great use. If we besides enumerate all the predicables, which we can find pretty completely in any good ontology (for example, Baumgarten's), and arrange them in classes under the categories, in which operation we must not neglect to add as complete a dissection of all these concepts as possible, there will then arise a merely analytical part of metaphysics, which does not contain a single synthetical proposition, which might precede the second (the synthetical), and would by its precision and completeness be not only useful, but, in virtue of its system, be even to some extent elegant.

²⁰ See *Critique of Pure Reason*, *Von der Amphibolie der Reflexbegriffe*.

THIRD PART OF THE MAIN TRANSCENDENTAL PROBLEM

HOW IS METAPHYSICS IN GENERAL POSSIBLE?

§ 40. Pure mathematics and pure science of nature had no occasion for such a deduction, as we have made of both, for their own safety and certainty. For the former rests upon its own evidence; and the latter (though sprung from pure sources of the understanding) upon experience and its thorough confirmation. Physics cannot altogether refuse and dispense with the testimony of the latter; because with all its certainty, it can never, as philosophy, rival mathematics. Both sciences therefore stood in need of this inquiry, not for themselves, but for the sake of another science, metaphysics.

Metaphysics has to do not only with concepts of nature, which always find their application in experience, but also with pure rational concepts, which never can be given in any possible experience. Consequently the objective reality of these concepts (*viz.*, that they are not mere chimeras), and the truth or falsity of metaphysical assertions, cannot be discovered or confirmed by any experience. This part of metaphysics however is precisely what constitutes its essential end, to which the rest is only a means, and thus this science is in need of such a deduction for its own sake. The third question now proposed relates therefore as it were to the root and essential difference of metaphysics, *i.e.*, the occupation of Reason with itself, and the supposed knowledge of objects arising immediately from this incubation of its own concepts, without requiring, or indeed being able to reach that knowledge through, experience.²¹

Without solving this problem reason never is justified. The empirical use to which reason limits the pure understanding, does not fully satisfy the proper destination of the latter. Every single experience is only a part of the whole sphere of its domain, but the absolute totality of all possible experience is itself not experience. Yet it is a necessary [concrete] problem for reason, the mere representation of which requires concepts quite different from the cate-

²¹ If we can say, that a science is actual at least in the idea of all men, as soon as it appears that the problems which lead to it are proposed to everybody by the nature of human reason, and that therefore many (though faulty) endeavors are unavoidably made in its behalf, then we are bound to say that metaphysics is subjectively (and indeed necessarily) actual, and therefore we justly ask, how is it (objectively) possible.

gories, whose use is only immanent, or refers to experience, so far as it can be given. Whereas the concepts of reason aim at the completeness, i.e., the collective unity of all possible experience, and thereby transcend every given experience. Thus they become *transcendent*.

As the understanding stands in need of categories for experience, reason contains in itself the source of ideas, by which I mean necessary concepts, whose object cannot be given in any experience. The latter are inherent in the nature of reason, as the former are in that of the understanding. While the former carry with them an illusion likely to mislead, the illusion of the latter is inevitable, though it certainly can be kept from misleading us.

Since all illusion consists in holding the subjective ground of our judgments to be objective, a self-knowledge of pure reason in its transcendent (exaggerated) use is the sole preservative from the aberrations into which reason falls when it mistakes its destination, and refers that to the object transcendentally, which only regards its own subject and its guidance in all immanent use.

§ 41. The distinction of ideas, that is, of pure concepts of reason, from categories, or pure concepts of the understanding, as cognitions of a quite distinct species, origin and use, is so important a point in founding a science which is to contain the system of all these *a priori* cognitions, that without this distinction metaphysics is absolutely impossible, or is at best a random, bungling attempt to build a castle in the air without a knowledge of the materials or of their fitness for any purpose. Had the *Critique of Pure Reason* done nothing but first point out this distinction, it had thereby contributed more to clear up our conception of, and to guide our inquiry in, the field of metaphysics, than all the vain efforts which have hitherto been made to satisfy the transcendent problems of pure reason, without ever surmising that we were in quite another field than that of the understanding, and hence classing concepts of the understanding and those of reason together, as if they were of the same kind.

§ 42. All pure cognitions of the understanding have this feature, that their concepts present themselves in experience, and their principles can be confirmed by it; whereas the transcendent cognitions of reason cannot, either as ideas, appear in experience, or as propositions ever be confirmed or refuted by it. Hence whatever

errors may slip in unawares, can only be discovered by pure reason itself—a discovery of much difficulty, because this very reason naturally becomes dialectical by means of its ideas, and this unavoidable illusion cannot be limited by any objective and dogmatical researches into things, but by a subjective investigation of reason itself as a source of ideas.

§ 43. In the *Critique of Pure Reason* it was always my greatest care to endeavor not only carefully to distinguish the several species of cognition, but to derive concepts belonging to each one of them from their common source. I did this in order that by knowing whence they originated, I might determine their use with safety, and also have the unanticipated but invaluable advantage of knowing the completeness of my enumeration, classification and specification of concepts *a priori*, and therefore according to principles. Without this, metaphysics is mere rhapsody, in which no one knows whether he has enough, or whether and where something is still wanting. We can indeed have this advantage only in pure philosophy, but of this philosophy it constitutes the very essence.

As I had found the origin of the categories in the four logical functions of all the judgments of the understanding, it was quite natural to seek the origin of the ideas in the three functions of the syllogisms of reason. For as soon as these pure concepts of reason (the transcendental ideas) are given, they could hardly, except they be held innate, be found anywhere else, than in the same activity of reason, which, so far as it regards mere form, constitutes the logical element of the syllogisms of reason; but, so far as it represents judgments of the understanding with respect to the one or to the other form *a priori*, constitutes transcendental concepts of pure reason.

The formal distinction of syllogisms renders their division into categorical, hypothetical, and disjunctive necessary. The concepts of reason founded on them contained therefore, first, the idea of the complete subject (the substantial); secondly, the idea of the complete series of conditions; thirdly, the determination of all concepts in the idea of a complete complex of that which is possible.²² The

²² In disjunctive judgments we consider all possibility as divided in respect to a particular concept. By the ontological principle of the universal determination of a thing in general, I understand the principle that either the one or the other of all possible contradictory predicates must be assigned to any object. This is at the same time the principle of all disjunctive judgments, constituting the foundation

first idea is psychological, the second cosmological, the third theological, and, as all three give occasion to Dialectics, yet each in its own way, the division of the whole Dialects of pure reason into its Paralogism, its Antinomy, and its Ideal, was arranged accordingly. Through this deduction we may feel assured that all the claims of pure reason are completely represented, and that none can be wanting; because the faculty of reason itself, whence they all take their origin, is thereby completely surveyed.

§ 44. In these general considerations it is also remarkable that the ideas of reason are unlike the categories, of no service to the use of our understanding in experience, but quite dispensable, and become even an impediment to the maxims of a rational cognition of nature. Yet in another aspect still to be determined they are necessary. Whether the soul is or is not a simple substance, is of no consequence to us in the explanation of its phenomena. For we cannot render the notion of a simple being intelligible by any possible experience that is sensuous or concrete. The notion is therefore quite void as regards all hoped-for insight into the cause of phenomena, and cannot at all serve as a principle of the explanation of that which internal or external experience supplies. So the cosmological ideas of the beginning of the world or of its eternity (*a parte ante*) cannot be of any greater service to us for the explanation of any event in the world itself. And finally we must, according to a right maxim of the philosophy of nature, refrain from all explanations of the design of nature, drawn from the will of a Supreme Being; because this would not be natural philosophy, but an acknowledgment that we have come to the end of it. The use of these ideas, therefore, is quite different from that of those categories by which (and by the principles built upon which) experience itself first becomes possible. But our laborious analytics of the understanding would be superfluous if we had nothing else in view than the mere cognition of nature as it can be given in experience; for reason does its work, both in mathematics and in the science of nature, quite safely and well without any of this subtle deduction. Therefore our

of our conception of possibility, and in it the possibility of every object in general is considered as determined. This may serve as a slight explanation of the above proposition: that the activity of reason in disjunctive syllogisms is formally the same as that by which it fashions the idea of a universal conception of all reality, containing in itself that which is positive in all contradictory predicates.

Critique of the Understanding combines with the ideas of pure reason for a purpose which lies beyond the empirical use of the understanding; but this we have above declared to be in this aspect totally inadmissible, and without any object or meaning. Yet there must be a harmony between that of the nature of reason and that of the understanding, and the former must contribute to the perfection of the latter, and cannot possibly upset it.

The solution of this question is as follows: Pure reason does not in its ideas point to particular objects, which lie beyond the field of experience, but only requires completeness of the use of the understanding in the system of experience. But this completeness can be a completeness of principles only, not of intuitions (i.e., concrete atsights or *Anschauungen*) and of objects. In order however to represent the ideas definitely, reason conceives them after the fashion of the cognition of an object. The cognition is as far as these rules are concerned completely determined, but the object is only an idea invented for the purpose of bringing the cognition of the understanding-as near as possible to the completeness represented by that idea.

Prefatory Remark to the Dialectics of Pure Reason

§ 45. We have above shown in §§ 33 and 34 that the purity of the categories from all admixture of sensuous determinations may mislead reason into extending their use, quite beyond all experience, to things in themselves; though as these categories themselves find no intuition which can give them meaning or sense *in concreto*, they, as mere logical functions, can represent a thing in general, but not give by themselves alone a determinate concept of anything. Such hyperbolic objects are distinguished by the appellation of *Noûmena*, or pure beings of the understanding (or better, beings of thought), such as, for example, "substance," but conceived without permanence in time, or "cause," but not acting in time, etc. Here predicates, that only serve to make the conformity-to-law of experience possible, are applied to these concepts, and yet they are deprived of all the conditions of intuition, on which alone experience is possible, and so these concepts lose all significance.

There is no danger, however, of the understanding spontaneously making an excursion so very wantonly beyond its own bounds into the field of the mere creatures of thought, without being impelled

by foreign laws. But when reason, which cannot be fully satisfied with any empirical use of the rules of the understanding, as being always conditioned, requires a completion of this chain of conditions, then the understanding is forced out of its sphere. And then it partly represents objects of experience in a series so extended that no experience can grasp, partly even (with a view to complete the series) it seeks entirely beyond it noumena, to which it can attach that chain, and so, having at last escaped from the conditions of experience, make its attitude as it were final. These are then the transcendental ideas, which, though according to the true but hidden ends of the natural determination of our reason, they may aim not at extravagant concepts, but at an unbounded extension of their empirical use, yet seduce the understanding by an unavoidable illusion to a transcendent use, which, though deceitful, cannot be restrained within the bounds of experience by any resolution, but only by scientific instruction and with much difficulty.

I. *The Psychological Idea*²³

§ 46. People have long since observed, that in all substances the proper subject, that which remains after all the accidents (as predicates) are abstracted, consequently that which forms the substance of things remains unknown, and various complaints have been made concerning these limits to our knowledge. But it will be well to consider that the human understanding is not to be blamed for its inability to know the substance of things, that is, to determine it by itself, but rather for requiring to cognise it which is a mere idea definitely as though it were a given object. Pure reason requires us to seek for every predicate of a thing its proper subject, and for this subject, which is itself necessarily nothing but a predicate, its subject, and so on indefinitely (or as far as we can reach). But hence it follows, that we must not hold anything, at which we can arrive, to be an ultimate subject, and that substance itself never can be thought by our understanding, however deep we may penetrate, even if all nature were unveiled to us. For the specific nature of our understanding consists in thinking everything discursively, that is, representing it by concepts, and so by mere predicates, to which therefore the absolute subject must always be wanting. Hence all

²³ See *Critique of Pure Reason, Von den Paralogismen der reinen Vernunft*.

the real properties, by which we cognise bodies, are mere accidents, not excepting impenetrability, which we can only represent to ourselves as the effect of a power of which the subject is unknown to us.

Now we appear to have this substance in the consciousness of ourselves (in the thinking subject), and indeed in an immediate intuition; for all the predicates of an internal sense refer to the *ego*, as a subject, and I cannot conceive myself as the predicate of any other subject. Hence completeness in the reference of the given concepts as predicates to a subject—not merely an idea, but an object—that is, the absolute subject itself, seems to be given in experience. But this expectation is disappointed. For the *ego* is not a concept,²⁴ but only the indication of the object of the internal sense, so far as we cognise it by no further predicate. Consequently it cannot be in itself a predicate of any other thing; but just as little can it be a determinate concept of an absolute subject, but is, as in all other cases, only the reference of the internal phenomena to their unknown subject. Yet this idea (which serves very well, as a regulative principle, totally to destroy all materialistic explanations of the internal phenomena of the soul) occasions by a very natural misunderstanding a very specious argument, which, from this supposed cognition of the substance of our thinking being, infers its nature, so far as the knowledge of it falls quite without the complex of experience.

§ 47. But though we may call this thinking self (the soul) substance, as being the ultimate subject of thinking which cannot be further represented as the predicate of another thing; it remains quite empty and without significance, if permanence—the quality which renders the concept of substances in experience fruitful—cannot be proved of it.

But permanence can never be proved of the concept of a substance, as a thing in itself, but for the purposes of experience only. This is sufficiently shown by the first Analogy of Experience,²⁵ and whoever will not yield to this proof may try for himself whether he

²⁴ Were the representation of the apperception (the *Ego*) a concept, by which anything could be thought, it could be used as a predicate of other things or contain predicates in itself. But it is nothing more than the feeling of an existence without the least definite conception and is only the representation of that to which all thinking stands in relation (*relatione accidentis*).

²⁵ Cf. *Critique, Von den Analogien der Erfahrung*.

can succeed in proving, from the concept of a subject which does not exist itself as the predicate of another thing, that its existence is thoroughly permanent, and that it cannot either in itself or by any natural cause originate or be annihilated. These synthetical *a priori* propositions can never be proved in themselves, but only in reference to things as objects of possible experience.

§ 48. If therefore from the concept of the soul as a substance, we would infer its permanence, this can hold good as regards possible experience only, not [of the soul] as a thing in itself and beyond all possible experience. But life is the subjective condition of all our possible experience, consequently we can only infer the permanence of the soul in life; for the death of man is the end of all experience which concerns the soul as an object of experience, except the contrary be proved, which is the very question in hand. The permanence of the soul can therefore only be proved (and no one cares for that) during the life of man, but not, as we desire to do, after death; and for this general reason, that the concept of substance, so far as it is to be considered necessarily combined with the concept of permanence, can be so combined only according to the principles of possible experience, and therefore for the purposes of experience only.²⁶

§ 49. That there is something real without us which not only corresponds, but must correspond, to our external perceptions, can likewise be proved to be not a connexion of things in themselves,

²⁶ It is indeed very remarkable how carelessly metaphysicians have always passed over the principle of the permanence of substances without ever attempting a proof of it; doubtless because they found themselves abandoned by all proofs as soon as they began to deal with the concept of substance. Common sense, which felt distinctly that without this presupposition no union of perceptions in experience is possible, supplied the want by a postulate. From experience itself it never could derive such a principle, partly because substances cannot be so traced in all their alterations and dissolutions, that the matter can always be found undiminished, partly because the principle contains *necessity*, which is always the sign of an *a priori* principle. People then boldly applied this postulate to the concept of soul as a *substance*, and concluded a necessary continuance of the soul after the death of man (especially as the simplicity of this substance, which is inferred from the indivisibility of consciousness, secured it from destruction by dissolution). Had they found the genuine source of this principle—a discovery which requires deeper researches than they were ever inclined to make—they would have seen, that the law of the permanence of substances has place for the purposes of experience only, and hence can hold good of things so far as they are to be cognised and conjoined with others in experience, but never independently of all possible experience, and consequently cannot hold good of the soul after death.

but for the sake of experience. This means that there is something empirical, i.e., some phenomenon in space without us, that admits of a satisfactory proof, for we have nothing to do with other objects than those which belong to possible experience; because objects which cannot be given us in any experience, do not exist for us. Empirically without me is that which appears in space, and space, together with all the phenomena which it contains, belongs to the representations, whose connexion according to laws of experience proves their objective truth, just as the connexion of the phenomena of the internal sense proves the actuality of my soul (as an object of the internal sense). By means of external experience I am conscious of the actuality of bodies, as external phenomena in space, in the same manner as by means of the internal experience I am conscious of the existence of my soul in time, but this soul is only cognised as an object of the internal sense of phenomena that constitute an internal state, and of which the essence in itself, which forms the basis of these phenomena, is unknown. Cartesian idealism therefore does nothing but distinguish external experience from dreaming; and the conformity to law (as a criterion of its truth) of the former, from the irregularity and the false illusion of the latter. In both it presupposes space and time as conditions of the existence of objects, and it only inquires whether the objects of the external senses, which we when awake put in space, are as actually to be found in it, as the object of the internal sense, the soul, is in time; that is, whether experience carries with it sure criteria to distinguish it from imagination. This doubt, however, may easily be disposed of, and we always do so in common life by investigating the connexion of phenomena in both space and time according to universal laws of experience, and we cannot doubt, when the representation of external things throughout agrees therewith, that they constitute truthful experience. Material idealism, in which phenomena are considered as such only according to their connexion in experience, may accordingly be very easily refuted; and it is just as sure an experience, that bodies exist without us (in space), as that I myself exist according to the representation of the internal sense (in time): for the notion without us, only signifies existence in space. However as the Ego in the proposition, "I am," means not only the object of internal intuition (in time), but the subject of consciousness, just as body means not only external intuition (in space), but the

thing-in-itself, which is the basis of this phenomenon; [as this is the case] the question, whether bodies (as phenomena of the external sense) exist as bodies apart from my thoughts, may without any hesitation be denied in nature. But the question, whether I myself as a phenomenon of the internal sense (the soul according to empirical psychology) exist apart from my faculty of representation in time, is an exactly similar inquiry, and must likewise be answered in the negative. And in this manner everything, when it is reduced to its true meaning, is decided and certain. The formal (which I have also called transcendental) actually abolishes the material, or Cartesian, idealism. For if space be nothing but a form of my sensibility, it is as a representation in me just as actual as I myself am, and nothing but the empirical truth of the representations in it remains for consideration. But, if this is not the case, if space and the phenomena in it are something existing without us, then all the criteria of experience beyond our perception can never prove the actuality of these objects without us.

II. *The Cosmological Idea*²¹

§ 50. This product of pure reason in its transcendent use is its most remarkable curiosity. It serves as a very powerful agent to rouse philosophy from its dogmatic slumber, and to stimulate it to the arduous task of undertaking a *Critique of Reason* itself.

I term this idea cosmological, because it always takes its object only from the sensible world, and does not use any other than those whose object is given to sense, consequently it remains in this respect in its native home, it does not become transcendent, and is therefore so far not mere idea; whereas, to conceive the soul as a simple substance, already means to conceive such an object (the simple) as cannot be presented to the senses. Yet the cosmological idea extends the connexion of the conditioned with its condition (whether the connexion is mathematical or dynamical) so far, that experience never can keep up with it. It is therefore with regard to this point always an idea, whose object never can be adequately given in any experience.

§ 51. In the first place, the use of a system of categories becomes here so obvious and unmistakable, that even if there were not sev-

²¹ Cf. *Critique*, *Die Antinomie der reinen Vernunft*.

eral other proofs of it, this alone would sufficiently prove it indispensable in the system of pure reason. There are only four such transcendent ideas, as there are so many classes of categories; in each of which, however, they refer only to the absolute completeness of the series of the conditions for a given conditioned. In analogy to these cosmological ideas there are only four kinds of dialectical assertions of pure reason, which, as they are dialectical, thereby prove, that to each of them, on equally specious principles of pure reason, a contradictory assertion stands opposed. As all the metaphysical art of the most subtle distinction cannot prevent this opposition, it compels the philosopher to recur to the first sources of pure reason itself. This Antinomy, not arbitrarily invented, but founded in the nature of human reason, and hence unavoidable and never ceasing, contains the following four theses together with their antitheses:

I

Thesis

The World has, as to Time and Space, a Beginning (limit).

Antithesis

The World is, as to Time and Space, infinite.

2

Thesis

Everything in the World consists of [elements that are] simple.

Antithesis

There is nothing simple, but everything is composite.

3

Thesis

There are in the World Causes through Freedom.

Antithesis

There is no Liberty, but all is Nature.

4

Thesis

In the Series of the World-Causes there is some necessary Being.

Antithesis

There is Nothing necessary in the World, but in this Series All is incidental.

§ 52. *a.* Here is the most singular phenomenon of human reason, no other instance of which can be shown in any other use. If we, as is commonly done, represent to ourselves the appearances of the sensible world as things in themselves, if we assume the principles of their combination as principles universally valid of things in themselves and not merely of experience, as is usually, nay without our *Critique*, unavoidably done, there arises an unexpected conflict, which never can be removed in the common dogmatical way; because the thesis, as well as the antithesis, can be shown by equally clear, evident, and irresistible proofs—for I pledge myself as to the correctness of all these proofs—and reason therefore perceives that it is divided with itself, a state at which the sceptic rejoices, but which must make the critical philosopher pause and feel ill at ease.

§ 52. *b.* We may blunder in various ways in metaphysics without any fear of being detected in falsehood. For we never can be refuted by experience if we but avoid self-contradiction, which in synthetical, though purely fictitious propositions, may be done whenever the concepts, which we connect, are mere ideas, that cannot be given (in their whole content) in experience. For how can we make out by experience, whether the world is from eternity or had a beginning, whether matter is infinitely divisible or consists of simple parts? Such concept cannot be given in any experience, be it ever so extensive, and consequently the falsehood either of the positive or the negative proposition cannot be discovered by this touch-stone.

The only possible way in which reason could have revealed unintentionally its secret Dialectics, falsely announced as Dogmatics, would be when it were made to ground an assertion upon a universally admitted principle, and to deduce the exact contrary with the greatest accuracy of inference from another which is equally granted. This is actually here the case with regard to four natural ideas of reason, whence four assertions on the one side, and as many counter-assertions on the other arise, each consistently following from universally-acknowledged principles. Thus they reveal by the use of these principles the dialectical illusion of pure reason which would otherwise forever remain concealed.

This is therefore a decisive experiment, which must necessarily

expose any error lying hidden in the assumptions of reason.²⁸ Contradictory propositions cannot both be false, except the concept, which is the subject of both, is self-contradictory; for example, the propositions, "a square circle is round, and a square circle is not round," are both false. For, as to the former it is false, that the circle is round, because it is quadrangular; and it is likewise false, that it is not round, that is, angular, because it is a circle. For the logical criterion of the impossibility of a concept consists in this, that if we presuppose it, two contradictory propositions both become false; consequently, as no middle between them is conceivable, nothing at all is thought by that concept.

§ 52. *c.* The first two antinomies, which I call mathematical, because they are concerned with the addition or division of the homogeneous, are founded on such a self-contradictory concept; and hence I explain how it happens, that both the Thesis and Antithesis of the two are false.

When I speak of objects in time and in space, it is not of things in themselves, of which I know nothing, but of things in appearance, that is, of experience, as the particular way of cognising objects which is afforded to man. I must not say of what I think in time or in space, that in itself, and independent of these my thoughts, it exists in space and in time; for in that case I should contradict myself; because space and time, together with the appearances in them, are nothing existing in themselves and outside of my representations, but are themselves only modes of representation, and it is palpably contradictory to say, that a mere mode of representation exists without our representation. Objects of the senses therefore exist only in experience; whereas to give them a self-subsisting existence apart from experience or before it, is merely to represent to ourselves that experience actually exists apart from experience or before it.

²⁸ I therefore would be pleased to have the critical reader to devote to this antinomy of pure reason his chief attention, because nature itself seems to have established it with a view to stagger reason in its daring pretensions, and to force it to self-examination. For every proof, which I have given, as well of the thesis as of the antithesis, I undertake to be responsible, and thereby to show the certainty of the inevitable antinomy of reason. When the reader is brought by this curious phenomenon to fall back upon the proof of the presumption upon which it rests, he will feel himself obliged to investigate the ultimate foundation of all the cognition of pure reason with me more thoroughly.

Now if I inquire after the quantity of the world, as to space and time, it is equally impossible, as regards all my notions, to declare it infinite or to declare it finite. For neither assertion can be contained in experience, because experience either of an infinite space, or of an infinite time elapsed, or again, of the boundary of the world by a void space, or by an antecedent void time, is impossible; these are mere ideas. This quantity of the world, which is determined in either way, should therefore exist in the world itself apart from all experience. This contradicts the notion of a world of sense, which is merely a complex of the appearances whose existence and connexion occur only in our representations, that is, in experience, since this latter is not an object in itself, but a mere mode of representation. Hence it follows, that as the concept of an absolutely existing world of sense is self-contradictory, the solution of the problem concerning its quantity, whether attempted affirmatively or negatively, is always false.

The same holds good of the second antinomy, which relates to the division of phenomena. For these are mere representations, and the parts exist merely in their representation, consequently in the division, or in a possible experience where they are given, and the division reaches only as far as this latter reaches. To assume that an appearance, e.g., that of body, contains in itself before all experience all the parts, which any possible experience can ever reach, is to impute to a mere appearance, which can exist only in experience, an existence previous to experience. In other words, it would mean that mere representations exist before they can be found in our faculty of representation. Such an assertion is self-contradictory, as also every solution of our misunderstood problem, whether we maintain, that bodies in themselves consist of an infinite number of parts, or of a finite number of simple parts.

§ 53. In the first (the mathematical) class of antinomies the falsehood of the assumption consists in representing in one concept something self-contradictory as if it were compatible (i.e., an appearance as an object in itself). But, as to the second (the dynamical) class of antinomies, the falsehood of the representation consists in representing as contradictory what is compatible; so that, as in the former case, the opposed assertions are both false, in this case, on the other hand, where they are opposed to one another by mere misunderstanding, they may both be true.

Any mathematical connexion necessarily presupposes homogeneity of what is connected (in the concept of magnitude), while the dynamical one by no means requires the same. When we have to deal with extended magnitudes, all the parts must be homogeneous with one another and with the whole; whereas, in the connexion of cause and effect, homogeneity may indeed likewise be found, but is not necessary; for the concept of causality (by means of which something is posited through something else quite different from it), at all events, does not require it.

If the objects of the world of sense are taken for things in themselves, and the above laws of nature for the laws of things in themselves, the contradiction would be unavoidable. So also, if the subject of freedom were, like other objects, represented as mere appearance, the contradiction would be just as unavoidable, for the same predicate would at once be affirmed and denied of the same kind of object in the same sense. But if natural necessity is referred merely to appearances, and freedom merely to things in themselves, no contradiction arises, if we at once assume, or admit both kinds of causality, however difficult or impossible it may be to make the latter kind conceivable.

As appearance every effect is an event, or something that happens in time; it must, according to the universal law of nature, be preceded by a determination of the causality of its cause (a state), which follows according to a constant law. But this determination of the cause as causality must likewise be something that takes place or happens; the cause must have begun to act, otherwise no succession between it and the effect could be conceived. Otherwise the effect, as well as the causality of the cause, would have always existed. Therefore the determination of the cause to act must also have originated among appearances, and must consequently, as well as its effect, be an event, which must again have its cause, and so on; hence natural necessity must be the condition, on which effective causes are determined. Whereas if freedom is to be a property of certain causes of appearances, it must, as regards these, which are events, be a faculty of starting them spontaneously, that is, without the causality of the cause itself, and hence without requiring any other ground to determine its start. But then the cause, as to its causality, must not rank under time-determinations of its state, that is, it cannot be an appearance, and must be con-

sidered a thing in itself, while its effects would be only appearances.²⁹ If without contradiction we can think of the beings of understanding [*Verstandeswesen*] as exercising such an influence on appearances, then natural necessity will attach to all connexions of cause and effect in the sensuous world, though on the other hand, freedom can be granted to such cause, as is itself not an appearance (but the foundation of appearance). Nature therefore and freedom can without contradiction be attributed to the very same thing, but in different relations—on one side as a phenomenon, on the other as a thing in itself.

We have in us a faculty, which not only stands in connexion with its subjective determining grounds that are the natural causes of its actions, and is so far the faculty of a being that itself belongs to appearances, but is also referred to objective grounds, that are only ideas, so far as they can determine this faculty, a connexion which is expressed by the word *ought*. This faculty is called *reason*, and, so far as we consider a being (man) entirely according to this objectively determinable reason, he cannot be considered as a being of sense, but this property is that of a thing in itself, of which we cannot comprehend the possibility—I mean how the *ought* (which however has never yet taken place) should determine its activity, and can become the cause of actions, whose effect is an appearance in the sensible world. Yet the causality of reason would be freedom with regard to the effects in the sensuous world, so far as we can consider objective grounds, which are themselves ideas, as their determinants. For its action in that case would not depend upon subjective conditions, consequently not upon those of time, and of

²⁹ The idea of freedom occurs only in the relation of the intellectual, as cause, to the appearance, as effect. Hence we cannot attribute freedom to matter in regard to the incessant action by which it fills its space, though this action takes place from an internal principle. We can likewise find no notion of freedom suitable to purely rational beings, for instance, to God, so far as his action is immanent. For his action though independent of external determining causes, is determined in his eternal reason, that is, in the divine *nature*. It is only, if *something is to start* by an action, and so the effect occurs in the sequence of time, or in the world of sense (e.g., the beginning of the world), that we can put the question, whether the causality of the cause must in its turn have been started, or whether the cause can originate an effect without its causality itself beginning. In the former case the concept of this causality is a concept of natural necessity, in the latter, that of freedom. From this the reader will see, that, as I explained freedom to be the faculty of starting an event spontaneously, I have exactly hit the notion which is the problem of metaphysics.

course not upon the law of nature, which serves to determine them, because grounds of reason give to actions the rule universally, according to principles, without the influence of the circumstances of either time or place.

What I adduce here is merely meant as an example to make the thing intelligible, and does not necessarily belong to our problem, which must be decided from mere concepts, independently of the properties which we meet in the actual world.

Now I may say without contradiction: that all the actions of rational beings, so far as they are appearances (occurring in any experience), are subject to the necessity of nature; but the same actions, as regards merely the rational subject and its faculty of acting according to mere reason, are free. For what is required for the necessity of nature? Nothing more than the determinability of every event in the world of sense according to constant laws, that is, a reference to cause in the appearance; in this process the thing in itself at its foundation and its causality remain unknown. But I say, that the law of nature remains, whether the rational being is the cause of the effects in the sensuous world from reason, that is, through freedom, or whether it does not determine them on grounds of reason. For, if the former is the case, the action is performed according to maxims, the effect of which as appearance is always conformable to constant laws; if the latter is the case, and the action not performed on principles of reason, it is subjected to the empirical laws of the sensibility, and in both cases the effects are connected according to constant laws; more than this we do not require or know concerning natural necessity. But in the former case reason is the cause of these laws of nature, and therefore free; in the latter the effects follow according to mere natural laws of sensibility, because reason does not influence it; but reason itself is not determined on that account by the sensibility, and is therefore free in this case too. Freedom is therefore no hindrance to natural law in appearance, neither does this law abrogate the freedom of the practical use of reason, which is connected with things in themselves, as determining grounds.

Thus practical freedom, viz., the freedom in which reason possesses causality according to objectively determining grounds, is rescued and yet natural necessity is not in the least curtailed with regard to the very same effects, as appearances. The same remarks

will serve to explain what we had to say concerning transcendental freedom and its compatibility with natural necessity (in the same subject, but not taken in the same reference). For, as to this, every beginning of the action of a being from objective causes regarded as determining grounds, is always a first start, though the same action is in the series of appearances only a subordinate start, which must be preceded by a state of the cause, which determines it, and is itself determined in the same manner by another immediately preceding. Thus we are able, in rational beings, or in beings generally, so far as their causality is determined in them as things in themselves, to imagine a faculty of beginning from itself a series of states, without falling into contradiction with the laws of nature. For the relation of the action to objective grounds of reason is not a time-relation; in this case that which determines the causality does not precede in time the action, because such determining grounds represent not a reference to objects of sense, e.g., to causes in the appearances, but to determining causes, as things in themselves, which do not rank under conditions of time. And in this way the action, with regard to the causality of reason, can be considered as a first start in respect to the series of appearances, and yet also as a merely subordinate beginning. We may therefore without contradiction consider it in the former aspect as free, but in the latter (in so far as it is merely appearance) as subject to natural necessity.

As to the fourth Antinomy, it is solved in the same way as the conflict of reason with itself in the third. For, provided the cause *in* the appearance is distinguished from the cause *of* the appearance (so far as it can be thought as a thing in itself), both propositions are perfectly reconcilable: the one, that there is nowhere in the sensuous world a cause (according to similar laws of causality), whose existence is absolutely necessary; the other, that this world is nevertheless connected with a Necessary Being as its cause (but of another kind and according to another law). The incompatibility of these propositions entirely rests upon the mistake of extending what is valid merely of appearances to things in themselves, and in general confusing both in one concept.

§ 54. This then is the proposition and this the solution of the whole antinomy, in which reason finds itself involved in the application of its principles to the sensible world. The former alone (the mere proposition) would be a considerable service in the cause of

our knowledge of human reason, even though the solution might fail to fully satisfy the reader, who has here to combat a natural illusion, which has been but recently exposed to him, and which he had hitherto always regarded as genuine. For one result at least is unavoidable. As it is quite impossible to prevent this conflict of reason with itself—so long as the objects of the sensible world are taken for things in themselves, and not for mere appearances, which they are in fact—the reader is thereby compelled to examine over again the deduction of all our *a priori* cognition and the proof which I have given of my deduction in order to come to a decision on the question. This is all I require at present; for when in this occupation he shall have thought himself deep enough into the nature of pure reason, those concepts by which alone the solution of the conflict of reason is possible, will become sufficiently familiar to him. Without this preparation I cannot expect an unreserved assent even from the most attentive reader.

III. *The Theological Idea*³⁰

§ 55. The third transcendental Idea, which affords matter for the most important, but, if pursued only speculatively, transcendent and thereby dialectical use of reason, is the ideal of pure reason. Reason in this case does not, as with the psychological and the cosmological Ideas, begin from experience, and err by exaggerating its grounds, in striving to attain, if possible, the absolute completeness of their series. It rather totally breaks with experience, and from mere concepts of what constitutes the absolute completeness of a thing in general, consequently by means of the idea of a most perfect primal Being, it proceeds to determine the possibility and therefore the actuality of all other things. And so the mere presupposition of a Being, who is conceived not in the series of experience, yet for the purposes of experience—for the sake of comprehending its connexion, order, and unity—i.e., the idea [the notion of it], is more easily distinguished from the concept of the understanding here, than in the former cases. Hence we can easily expose the dialectical illusion which arises from our making the subjective conditions of our thinking objective conditions of objects themselves, and an hypothesis necessary for the satisfaction of our

³⁰ Cf. *Critique*, the chapter on "Transcendental Ideals."

reason, a dogma. As the observations of the *Critique* on the pretensions of transcendental theology are intelligible, clear, and decisive, I have nothing more to add on the subject.

General Remark on the Transcendental Ideas

§ 56. The objects, which are given us by experience, are in many respects incomprehensible, and many questions, to which the law of nature leads us, when carried beyond a certain point (though quite conformably to the laws of nature), admit of no answer; as for example the question: why substances attract one another? But if we entirely quit nature, or in pursuing its combinations, exceed all possible experience, and so enter the realm of mere ideas, we cannot then say that the object is incomprehensible, and that the nature of things proposes to us insoluble problems. For we are not then concerned with nature or in general with given objects, but with concepts, which have their origin merely in our reason, and with mere creations of thought; and all the problems that arise from our notions of them must be solved, because of course reason can and must give a full account of its own procedure.³¹ As the psychological, cosmological, and theological Ideas are nothing but pure concepts of reason, which cannot be given in any experience, the questions which reason asks us about them are put to us not by the objects, but by mere maxims of our reason for the sake of its own satisfaction. They must all be capable of satisfactory answers, which is done by showing that they are principles which bring our use of the understanding into thorough agreement, completeness, and synthetical unity, and that they so far hold good of experience only, but of experience as a whole.

Although an absolute whole of experience is impossible, the idea of a whole of cognition according to principles must impart to our

³¹ Herr Platner in his *Aphorisms* acutely says (§§ 728, 729), "If reason be a criterion, no concept, which is incomprehensible to human reason, can be possible. Incomprehensibility has place in what is actual only. Here incomprehensibility arises from the insufficiency of the acquired ideas." It sounds paradoxical, but is otherwise not strange to say, that in nature there is much incomprehensible (e.g., the faculty of generation) but if we mount still higher, and even go beyond nature, everything again becomes comprehensible; for we then quit entirely the objects, which can be given us, and occupy ourselves merely about ideas, in which occupation we can easily comprehend the law that reason prescribes by them to the understanding for its use in experience, because the law is the reason's own production.

knowledge a peculiar kind of unity, that of a system, without which it is nothing but piecework, and cannot be used for proving the existence of a highest purpose (which can only be the general system of all purposes), I do not here refer only to the practical, but also to the highest purpose of the speculative use of reason.

The transcendental Ideas therefore express the peculiar application of reason as a principle of systematic unity in the use of the understanding. Yet if we assume this unity of the mode of cognition to be attached to the object of cognition, if we regard that which is merely regulative to be constitutive, and if we persuade ourselves that we can by means of these Ideas enlarge our cognition transcendently, or far beyond all possible experience, while it only serves to render experience within itself as nearly complete as possible, i.e., to limit its progress by nothing that cannot belong to experience: we suffer from a mere misunderstanding in our estimate of the proper application of our reason and of its principles, and from a Dialectic, which both confuses the empirical use of reason, and also sets reason at variance with itself.

CONCLUSION

On the Determination of the Bounds of Pure Reason

§ 57. Having adduced the clearest arguments, it would be absurd for us to hope that we can know more of any object, than belongs to the possible experience of it, or lay claim to the least atom of knowledge about anything not assumed to be an object of possible experience, which would determine it according to the constitution it has in itself. For how could we determine anything in this way, since time, space, and the categories, and still more all the concepts formed by empirical experience or perception in the sensible world (*Anschauung*), have and can have no other use, than to make experience possible. And if this condition is omitted from the pure concepts of the understanding, they do not determine any object, and have no meaning whatever.

But it would be on the other hand a still greater absurdity if we conceded no things in themselves, or set up our experience for the only possible mode of knowing things, our way of beholding (*Anschauung*) them in space and in time for the only possible way, and our discursive understanding for the archetype of every pos-

sible understanding; in fact if we wished to have the principles of the possibility of experience considered universal conditions of things in themselves.

Our principles, which limit the use of reason to possible experience, might in this way become transcendent, and the limits of our reason be set up as limits of the possibility of things in themselves (as Hume's dialogues may illustrate), if a careful critique did not guard the bounds of our reason with respect to its empirical use, and set a limit to its pretensions. Scepticism originally arose from metaphysics and its licentious dialectics. At first it might, merely to favor the empirical use of reason, announce everything that transcends this use as worthless and deceitful; but by and by, when it was perceived that the very same principles that are used in experience, insensibly, and apparently with the same right, led still further than experience extends, then men began to doubt even the propositions of experience. But here there is no danger; for common sense will doubtless always assert its rights. A certain confusion, however, arose in science which cannot determine how far reason is to be trusted, and why only so far and no further, and this confusion can only be cleared up and all future relapses obviated by a formal determination, on principle, of the boundary of the use of our reason.

We cannot indeed, beyond all possible experience, form a definite notion of what things in themselves may be. Yet we are not at liberty to abstain entirely from inquiring into them; for experience never satisfies reason fully, but in answering questions, refers us further and further back, and leaves us dissatisfied with regard to their complete solution. This any one may gather from the Dialectics of pure reason, which therefore has its good subjective grounds. Having acquired, as regards the nature of our soul, a clear conception of the subject, and having come to the conviction, that its manifestations cannot be explained materialistically, who can refrain from asking what the soul really is, and, if no concept of experience suffices for the purpose, from accounting for it by a concept of reason (that of a simple immaterial being), though we cannot by any means prove its objective reality? Who can satisfy himself with mere empirical knowledge in all the cosmological questions of the duration and of the quantity of the world, of freedom or of natural necessity, since every answer given on principles of ex-

perience begets a fresh question, which likewise requires its answer and thereby clearly shows the insufficiency of all physical modes of explanation to satisfy reason? Finally, who does not see in the thorough-going contingency and dependence of all his thoughts and assumptions on mere principles of experience, the impossibility of stopping there? And who does not feel himself compelled, notwithstanding all interdictions against losing himself in transcendent ideas, to seek rest and contentment beyond all the concepts which he can vindicate by experience, in the concept of a Being, the possibility of which we cannot conceive, but at the same time cannot be refuted, because it relates to a mere being of the understanding, and without it reason must needs remain forever dissatisfied?

Bounds (in extended beings) always presuppose a space existing outside a certain definite place, and inclosing it; limits do not require this, but are mere negations, which affect a quantity, so far as it is not absolutely complete. But our reason, as it were, sees in its surroundings a space for the cognition of things in themselves, though we can never have definite notions of them, and are limited to appearances only.

As long as the cognition of reason is homogeneous, definite bounds to it are inconceivable. In mathematics and in natural philosophy human reason admits of limits, but not of bounds, viz., that something indeed lies without it, at which it can never arrive, but not that it will at any point find completion in its internal progress. The enlarging of our views in mathematics, and the possibility of new discoveries, are infinite; and the same is the case with the discovery of new properties of nature, of new powers and laws, by continued experience and its rational combination. But limits cannot be mistaken here, for mathematics refers to appearances only, and what cannot be an object of sensuous contemplation, such as the concepts of metaphysics and of morals, lies entirely without its sphere, and it can never lead to them; neither does it require them. It is therefore not a continual progress and an approximation towards these sciences, and there is not, as it were, any point or line of contact. Natural science will never reveal to us the internal constitution of things, which though not appearance, yet can serve as the ultimate ground of explaining appearance. Nor does that science require this for its physical explanations. Nay even if such grounds should be offered from other sources (for in-

stance, the influence of immaterial beings), they must be rejected and not used in the progress of its explanations. For these explanations must only be grounded upon that which as an object of sense can belong to experience, and be brought into connexion with our actual perceptions and empirical laws.

But metaphysics leads us towards bounds in the dialectical attempts of pure reason (not undertaken arbitrarily or wantonly, but stimulated thereto by the nature of reason itself). And the transcendental Ideas, as they do not admit of evasion, and are never capable of realisation, serve to point out to us actually not only the bounds of the pure use of reason, but also the way to determine them. Such is the end and the use of this natural predisposition of our reason, which has brought forth metaphysics as its favorite child, whose generation, like every other in the world, is not to be ascribed to blind chance, but to an original germ, wisely organised for great ends. For metaphysics, in its fundamental features, perhaps more than any other science, is placed in us by nature itself, and cannot be considered the production of an arbitrary choice or a casual enlargement in the progress of experience from which it is quite disparate.

Reason with all its concepts and laws of the understanding, which suffice for empirical use, i.e., within the sensible world, finds in itself no satisfaction because ever-recurring questions deprive us of all hope of their complete solution. The transcendental ideas, which have that completion in view, are such problems of reason. But it sees clearly, that the sensuous world cannot contain this completion, neither consequently can all the concepts, which serve merely for understanding the world of sense, such as space and time, and whatever we have adduced under the name of pure concepts of the understanding. The sensuous world is nothing but a chain of appearances connected according to universal laws; it has therefore no subsistence by itself; it is not the thing in itself, and consequently must point to that which contains the basis of this experience, to beings which cannot be cognised merely as phenomena, but as things in themselves. In the cognition of them alone reason can hope to satisfy its desire of completeness in proceeding from the conditioned to its conditions.

We have above (§§ 33, 34) indicated the limits of reason with regard to all cognition of mere creations of thought. Now, since the

transcendental ideas have urged us to approach them, and thus have led us, as it were, to the spot where the occupied space (*viz.*, experience) touches the void (that of which we can know nothing, *viz.*, noumena), we can determine the bounds of pure reason. For in all bounds there is something positive (*e.g.*, a surface is the boundary of corporeal space, and is therefore itself a space, a line is a space, which is the boundary of the surface, a point the boundary of the line, but yet always a place in space), whereas limits contain mere negations. The limits pointed out in those paragraphs are not enough after we have discovered that beyond them there still lies something (though we can never cognise what it is in itself). For the question now is, What is the attitude of our reason in this connexion of what we know with what we do not, and never shall, know? This is an actual connexion of a known thing with one quite unknown (and which will always remain so), and though what is unknown should not become the least more known—which we cannot even hope—yet the notion of this connexion must be definite, and capable of being rendered distinct.

We must therefore accept an immaterial being, a world of understanding, and a Supreme Being (all mere noumena), because in them only, as things in themselves, reason finds that completion and satisfaction, which it can never hope for in the derivation of appearances from their homogeneous grounds, and because these actually have reference to something distinct from them (and totally heterogeneous), as appearances always presuppose an object in itself, and therefore suggest its existence whether we can know more of it or not.

But as we can never cognise these beings of understanding as they are in themselves, that is, definitely, yet must assume them as regards the sensible world, and connect them with it by reason, we are at least able to think this connexion by means of such concepts as express their relation to the world of sense. Yet if we represent to ourselves a being of the understanding by nothing but pure concepts of the understanding, we then indeed represent nothing definite to ourselves, consequently our concept has no significance; but if we think it by properties borrowed from the sensuous world, it is no longer a being of understanding, but is conceived as an appearance, and belongs to the sensible world. Let us take an instance from the notion of the Supreme Being.

Our deistic conception is quite a pure concept of reason, but represents only a thing containing all realities, without being able to determine any one of them; because for that purpose an example must be taken from the world of sense, in which case we should have an object of sense only, not something quite heterogeneous, which can never be an object of sense. Suppose I attribute to the Supreme Being understanding, for instance; I have no concept of an understanding other than my own, one that must receive its perceptions (*Anschauung*) by the senses, and which is occupied in bringing them under rules of the unity of consciousness. Then the elements of my concept would always lie in the appearance; I should however by the insufficiency of the appearance be necessitated to go beyond them to the concept of a being which neither depends upon appearance, nor is bound up with them as conditions of its determination. But if I separate understanding from sensibility to obtain a pure understanding, then nothing remains but the mere form of thinking without perception (*Anschauung*), by which form alone I can cognise nothing definite, and consequently no object. For that purpose I should conceive another understanding, such as would directly perceive its objects,³² but of which I have not the least notion; because the human understanding is discursive, and can [not directly perceive, it can] only cognise by means of general concepts. And the very same difficulties arise if we attribute a will to the Supreme Being; for we have this concept only by drawing it from our internal experience, and therefore from our dependence for satisfaction upon objects whose existence we require; and so the notion rests upon sensibility, which is absolutely incompatible with the pure concept of the Supreme Being.

Hume's objections to deism are weak, and affect only the proofs, and not the deistic assertion itself. But as regards theism, which depends on a stricter determination of the concept of the Supreme Being which in deism is merely transcendent, they are very strong, and as this concept is formed, in certain (in fact in all common) cases irrefutable. Hume always insists, that by the mere concept of an original being, to which we apply only ontological predicates (eternity, omnipresence, omnipotence), we think nothing definite, and that properties which can yield a concept *in concreto* must be superadded; that it is not enough to say, it is Cause, but we must

³² "Der die Gegenstände anschaute."

explain the nature of its causality, for example, that of an understanding and of a will. He then begins his attacks on the essential point itself, i. e., theism, as he had previously directed his battery only against the proofs of deism, an attack which is not very dangerous to it in its consequences. All his dangerous arguments refer to anthropomorphism, which he holds to be inseparable from theism, and to make it absurd in itself; but if the former be abandoned, the latter must vanish with it, and nothing remain but desim, of which nothing can come, which is of no value, and which cannot serve as any foundation to religion or morals. If this anthropomorphism were really unavoidable, no proofs whatever of the existence of a Supreme Being, even were they all granted, could determine for us the concept of this Being without involving us in contradictions.

If we connect with the command to avoid all transcendent judgments of pure reason, the command (which apparently conflicts with it) to proceed to concepts that lie beyond the field of its immanent (empirical) use, we discover that both can subsist together, but only at the boundary of all lawful use of reason. For this boundary belongs as well to the field of experience, as to that of the creations of thought, and we are thereby taught, as well, how these so remarkable ideas serve merely for marking the bounds of human reason. On the one hand they give warning not boundlessly to extend cognition of experience, as if nothing but world remained for us to cognise, and yet, on the other hand, not to transgress the bounds of experience, and to think of judging about things beyond them, as things in themselves.

But we stop at this boundary if we limit our judgment merely to the relation which the world may have to a Being whose very concept lies beyond all the knowledge which we can attain within the world. For we then do not attribute to the Supreme Being any of the properties in themselves, by which we represent objects of experience, and thereby avoid dogmatic anthropomorphism; but we attribute them to his relation to the world, and allow ourselves a symbolical anthropomorphism, which in fact concerns language only, and not the object itself.

If I say that we are compelled to consider the world, as if it were the work of a Supreme Understanding and Will, I really say nothing more, than that a watch, a ship, a regiment, bears the same relation

to the watchmaker, the shipbuilder, the commanding officer, as the world of sense (or whatever constitutes the substratum of this complex of appearances) does to the Unknown, which I do not hereby cognise as it is in itself, but as it is for me or in relation to the world, of which I am a part.

§ 58. Such a cognition is one of analogy, and does not signify (as is commonly understood) an imperfect similarity of two things, but a perfect similarity of relations between two quite dissimilar things.³³ By means of this analogy, however, there remains a concept of the Supreme Being sufficiently determined *for us*, though we have left out everything that could determine it absolutely or in itself; for we determine it as regards the world and as regards ourselves, and more do we not require. The attacks which Hume makes upon those who would determine this concept absolutely, by taking the materials for so doing from themselves and the world, do not affect us; and he cannot object to us, that we have nothing left if we give up the objective anthropomorphism of the concept of the Supreme Being.

For let us assume at the outset (as Hume in his dialogues makes Philo grant Cleanthes), as a necessary hypothesis, the deistical concept of the First Being, in which this Being is thought by the mere ontological predicates of substance, of cause, etc. This must be done, because reason, actuated in the sensible world by mere conditions, which are themselves always conditional, cannot otherwise have any satisfaction, and it therefore can be done without falling into anthropomorphism (which transfers predicates from the world of sense to a Being quite distinct from the world), because those predicates are mere categories, which, though they do not give a

³³ There is e. g., an analogy between the juridical relation of human actions and the mechanical relation of motive powers. I never can do anything to another man without giving him a right to do the same to me on the same conditions; just as no mass can act with its motive power on another mass without thereby occasioning the other to react equally against it. Here right and motive power are quite dissimilar things, but in their relation there is complete similarity. By means of such an analogy I can obtain a notion of the relation of things which absolutely are unknown to me. For instance, as the promotion of the welfare of children (=a) is to the love of parents (=b), so the welfare of the human species (=c) is to that unknown [quantity which is] in God (=x), which we call love; not as if it had the least similarity to any human inclination, but because we can suppose its relation to the world to be similar to that which things of the world bear one another. But the concept of relation in this case is a mere category, viz., the concept of cause, which has nothing to do with sensibility.

determinate concept of God, yet give a concept not limited to any conditions of sensibility. Thus nothing can prevent our predicating of this Being a causality through reason with regard to the world, and thus passing to theism, without being obliged to attribute to God in himself this kind of reason, as a property inhering in him. For as to the former, the only possible way of prosecuting the use of reason (as regards all possible experience, in complete harmony with itself) in the world of sense to the highest point, is to assume a supreme reason as a cause of all the connexions in the world. Such a principle must be quite advantageous to reason and can hurt it nowhere in its application to nature. As to the latter, reason is thereby not transferred as a property to the First Being in himself, but only to his relation to the world of sense, and so anthropomorphism is entirely avoided. For nothing is considered here but the cause of the form of reason which is perceived everywhere in the world, and reason is attributed to the Supreme Being, so far as it contains the ground of this form of reason in the world, but according to analogy only, that is, so far as this expression shows merely the relation, which the Supreme Cause unknown to us has to the world, in order to determine everything in it conformably to reason in the highest degree. We are thereby kept from using reason as an attribute for the purpose of conceiving God, but instead of conceiving the world in such a manner as is necessary to have the greatest possible use of reason according to principle. We thereby acknowledge that the Supreme Being is quite inscrutable and even unthinkable in any definite way as to what he is in himself. We are thereby kept, on the one hand, from making a transcendent use of the concepts which we have of reason as an efficient cause (by means of the will), in order to determine the Divine Nature by properties, which are only borrowed from human nature, and from losing ourselves in gross and extravagant notions, and on the other hand from deluging the contemplation of the world with hyperphysical modes of explanation according to our notions of human reason, which we transfer to God, and so losing for this contemplation its proper application, according to which it should be a rational study of mere nature, and not a presumptuous derivation of its appearances from a Supreme Reason. The expression suited to our feeble notions is, that we conceive the world as if it came, as to its existence and internal plan, from a Supreme Reason, by which notion we both

cognise the constitution, which belongs to the world itself, yet without pretending to determine the nature of its cause in itself, and on the other hand, we transfer the ground of this constitution (of the form of reason in the world) upon the relation of the Supreme Cause to the world, without finding the world sufficient by itself for that purpose.³⁴

Thus the difficulties which seem to oppose theism disappear by combining with Hume's principle—"not to carry the use of reason dogmatically beyond the field of all possible experience"—this other principle, which he quite overlooked: "not to consider the field of experience as one which bounds itself in the eye of our reason." The *Critique of Pure Reason* here points out the true mean between dogmatism, which Hume combats, and skepticism, which he would substitute for it—a mean which is not like other means that we find advisable to determine for ourselves as it were mechanically (by adopting something from one side and something from the other), and by which nobody is taught a better way, but such a one as can be accurately determined on principles.

§ 59. At the beginning of this annotation I made use of the metaphor of a boundary, in order to establish the limits of reason in regard to its suitable use. The world of sense contains merely appearances, which are not things in themselves, but the understanding must assume these latter ones, viz., noumena. In our reason both are comprised, and the question is, How does reason proceed to set boundaries to the understanding as regards both these fields? Experience, which contains all that belongs to the sensuous world, does not bound itself; it only proceeds in every case from the conditioned to some other equally conditioned object. Its boundary must lie quite without it, and this field is that of the pure beings of the understanding. But this field, so far as the determination of the nature of these beings is concerned, is an empty space for us, and if dogmatically-determined concepts alone are in question, we cannot pass out of the field of possible experience. But as a boundary itself

³⁴ I may say, that the causality of the Supreme Cause holds the same place with regard to the world that human reason does with regard to its works of art. Here the nature of the Supreme Cause itself remains unknown to me: I only compare its effects (the order of the world) which I know, and their conformity to reason, to the effects of human reason which I also know; and hence I term the former reason, without attributing to it on that account what I understand in man by this term, or attaching to it anything else known to me, as its property.

is something positive, which belongs as well to that which lies within, as to the space that lies without the given complex, it is still an actual positive cognition, which reason only acquires by enlarging itself to this boundary, yet without attempting to pass it; because it there finds itself in the presence of an empty space, in which it can conceive forms of things, but not things themselves. But the setting of a boundary to the field of the understanding by something, which is otherwise unknown to it, is still a cognition which belongs to reason even at this standpoint, and by which it is neither confined within the sensible, nor straying without it, but only refers, as befits the knowledge of a boundary, to the relation between that which lies without it, and that which is contained within it.

Natural theology is such a concept at the boundary of human reason, being constrained to look beyond this boundary to the Idea of a Supreme Being (and, for practical purposes to that of an intelligible world also), not in order to determine anything relatively to this pure creation of the understanding, which lies beyond the world of sense, but in order to guide the use of reason within it according to principles of the greatest possible (theoretical as well as practical) unity. For this purpose we make use of the reference of the world of sense to an independent reason, as the cause of all its connexions. Thereby we do not purely invent a being, but, as beyond the sensible world there must be something that can only be thought by the pure understanding, we determine that something in this particular way, though only of course according to analogy.

And thus there remains our original proposition, which is the *résumé* of the whole *Critique*: "that reason by all its *a priori* principles never teaches us anything more than objects of possible experience, and even of these nothing more than can be cognised in experience." But this limitation does not prevent reason leading us to the objective boundary of experience, viz., to the reference to something which is not itself an object of experience, but is the ground of all experience. Reason does not however teach us anything concerning the thing in itself: it only instructs us as regards its own complete and highest use in the field of possible experience. But this is all that can be reasonably desired in the present case, and with which we have cause to be satisfied.

§ 60. Thus we have fully exhibited metaphysics as it is actually given in the natural predisposition of human reason, and in that

which constitutes the essential end of its pursuit, according to its subjective possibility. Though we have found, that this merely natural use of such a predisposition of our reason, if no discipline arising only from a scientific critique bridles and sets limits to it, involves us in transcendent, either apparently or really conflicting, dialectical syllogisms; and this fallacious metaphysics is not only unnecessary as regards the promotion of our knowledge of nature, but even disadvantageous to it: there yet remains a problem worthy of solution, which is to find out the natural ends intended by this disposition to transcendent concepts in our reason, because everything that lies in nature must be originally intended for some useful purpose.

Such an inquiry is of a doubtful nature; and I acknowledge, that what I can say about it is conjecture only, like every speculation about the first ends of nature. The question does not concern the objective validity of metaphysical judgments, but our natural predisposition to them, and therefore does not belong to the system of metaphysics but to anthropology.

When I compare all the transcendental Ideas, the totality of which constitutes the particular problem of natural pure reason, compelling it to quit the mere contemplation of nature, to transcend all possible experience, and in this endeavor to produce the thing (be it knowledge or fiction) called metaphysics, I think I perceive that the aim of this natural tendency is, to free our notions from the fetters of experience and from the limits of the mere contemplation of nature so far as at least to open to us a field containing mere objects for the pure understanding, which no sensibility can reach, not indeed for the purpose of speculatively occupying ourselves with them (for there we can find no ground to stand on), but because practical principles, which, without finding some such scope for their necessary expectation and hope, could not expand to the universality which reason unavoidably requires from a moral point of view.

So I find that the Psychological Idea (however little it may reveal to me the nature of the human soul, which is higher than all concepts of experience), shows the insufficiency of these concepts plainly enough, and thereby deters me from materialism, the psychological notion of which is unfit for any explanation of nature, and besides confines reason in practical respects. The Cosmological Ideas,

by the obvious insufficiency of all possible cognition of nature to satisfy reason in its lawful inquiry, serve in the same manner to keep us from naturalism, which asserts nature to be sufficient for itself. Finally, all natural necessity in the sensible world is conditional, as it always presupposes the dependence of things upon others, and unconditional necessity must be sought only in the unity of a cause different from the world of sense. But as the causality of this cause, in its turn, were it merely nature, could never render the existence of the contingent (as its consequent) comprehensible, reason frees itself by means of the Theological Idea from fatalism, (both as a blind natural necessity in the coherence of nature itself, without a first principle, and as a blind causality of this principle itself), and leads to the concept of a cause possessing freedom, or of a Supreme Intelligence. Thus the transcendental Ideas serve, if not to instruct us positively, at least to destroy the rash assertions of Materialism, of Naturalism, and of Fatalism, and thus to afford scope for the moral Ideas beyond the field of speculation. These considerations, I should think, explain in some measure the natural predisposition of which I spoke.

The practical value, which a merely speculative science may have, lies without the bounds of this science, and can therefore be considered as a scholion merely, and like all scholia does not form part of the science itself. This application however surely lies within the bounds of philosophy, especially of philosophy drawn from the pure sources of reason, where its speculative use in metaphysics must necessarily be at unity with its practical use in morals. Hence the unavoidable dialectics of pure reason, considered in metaphysics, as a natural tendency, deserves to be explained not as an illusion merely, which is to be removed, but also, if possible, as a natural provision as regards its end, though this duty, a work of supererogation, cannot justly be assigned to metaphysics proper.

The solutions of these questions which are treated in the chapter on the Regulative Use of the Ideas of Pure Reason³⁵ should be considered a second scholion which however has a greater affinity with the subject of metaphysics. For there certain rational principles are expounded which determine *a priori* the order of nature or rather of the understanding, which seeks nature's laws through experience. They seem to be constitutive and legislative with re-

³⁵ *Critique of Pure Reason*, II., chap III., section 7.

gard to experience, though they spring from pure reason, which cannot be considered, like the understanding, as a principle of possible experience. Now whether or not this harmony rests upon the fact, that just as nature does not inhere in appearances or in their source (the sensibility) itself, but only in so far as the latter is in relation to the understanding, as also a systematic unity in applying the understanding to bring about an entirety of all possible experience can only belong to the understanding when in relation to reason; and whether or not experience is in this way mediately subordinate to the legislation of reason: may be discussed by those who desire to trace the nature of reason even beyond its use in metaphysics, into the general principles of a history of nature; I have represented this task as important, but not attempted its solution, in the book itself.³⁶

And thus I conclude the analytical solution of the main question which I had proposed: How is metaphysics in general possible? by ascending from the data of its actual use in its consequences, to the grounds of its possibility.

SCHOLIA

SOLUTION OF THE GENERAL QUESTION OF THE PROLEGOMENA

"HOW IS METAPHYSICS POSSIBLE AS A SCIENCE?"

Metaphysics, as a natural disposition of reason, is actual, but if considered by itself alone as the analytical solution of the third principal question showed), dialectical and illusory. If we think of taking principles from it, and in using them follow the natural, but on that account not less false, illusion, we can never produce science, but only a vain dialectical art, in which one school may outdo another, but none can ever acquire a just and lasting approbation.

In order that as a science metaphysics may be entitled to claim not mere fallacious plausibility, but insight and conviction a

³⁶ Throughout in the *Critique* I never lost sight of the plan not to neglect anything, were it ever so recondite, that could render the inquiry into the nature of pure reason complete. Everybody may afterwards carry his researches as far as he pleases, when he has been merely shown what yet remains to be done. It is this a duty which must reasonably be expected of him who has made it his business to survey the whole field, in order to consign it to others for future cultivation and allotment. And to this branch both the scholia belong, which will hardly recommend themselves by their dryness to amateurs, and hence are added here for connoisseurs only.

Critique of Reason must itself exhibit the whole stock of *a priori* concepts, their division according to their various sources (Sensibility, Understanding, and Reason), together with a complete table of them, the analysis of all these concepts, with all their consequences, especially by means of the deduction of these concepts, the possibility of synthetical cognition *a priori*, the principles of its application and finally its bounds, all in a complete system. Critique, therefore, and critique alone, contains in itself the whole well-proved and well-tested plan, and even all the means required to accomplish metaphysics, as a science; by other ways and means it is impossible. The question here therefore is not so much how this performance is possible, as how to set it going, and induce men of clear heads to quit their hitherto perverted and fruitless cultivation for one that will not deceive, and how such a union for the common end may best be directed.

This much is certain, that whoever has once tasted Critique will be ever after disgusted with all dogmatical twaddle which he formerly put up with, because his reason must have something, and could find nothing better for its support.

Critique stands in the same relation to the common metaphysics of the schools, as chemistry does to alchemy, or as astronomy to the astrology of the fortune-teller. I pledge myself that nobody who has read through and through, and grasped the principles of, the Critique even in these Prolegomena only, will ever return to that old and sophistical pseudo-science; but will rather with a certain delight look forward to metaphysics which is now indeed in his power, requiring no more preparatory discoveries, and now at last affording permanent satisfaction to reason. For here is an advantage upon which, of all possible sciences, metaphysics alone can with certainty reckon: that it can be brought to such completion and fixity as to be incapable of further change, or of any augmentation by new discoveries; because here reason has the sources of its knowledge in itself, not in objects and their observation (*Anschauung*), by which latter its stock of knowledge cannot be further increased. When therefore it has exhibited the fundamental laws of its faculty completely and so definitely as to avoid all misunderstanding, there remains nothing for pure reason to cognise *a priori*, nay, there is even no ground to raise further questions. The sure prospect of knowledge so definite and so compact has a peculiar

charm, even though we should set aside all its advantages, of which I shall hereafter speak.

All false art, all vain wisdom, lasts its time, but finally destroys itself, and its highest culture is also the epoch of its decay. That this time is come for metaphysics appears from the state into which it has fallen among all learned nations, despite of all the zeal with which other sciences of every kind are prosecuted. The old arrangement of our university studies still preserves its shadow; now and then an Academy of Science tempts men by offering prizes to write essays on it, but it is no longer numbered among thorough sciences; and let any one judge for himself how a man of genius, if he were called a great metaphysician, would receive the compliment, which may be well-meant, but is scarce envied by anybody.

Yet, though the period of the downfall of all dogmatical metaphysics has undoubtedly arrived, we are yet far from being able to say that the period of its regeneration is come by means of a thorough and complete *Critique of Reason*. All transitions from a tendency to its contrary pass through the stage of indifference, and this moment is the most dangerous for an author, but, in my opinion, the most favorable for the science. For, when party spirit has died out by a total dissolution of former connexions, minds are in the best state to listen to several proposals for an organisation according to a new plan.

When I say, that I hope these *Prolegomena* will excite investigation in the field of critique and afford a new and promising object to sustain the general spirit of philosophy, which seems on its speculative side to want sustenance, I can imagine beforehand, that every one, whom the thorny paths of my *Critique* have tired and put out of humor, will ask me, upon what I found this hope. My answer is, upon the irresistible law of necessity.

That the human mind will ever give up metaphysical researches is as little to be expected as that we should prefer to give up breathing altogether, to avoid inhaling impure air. There will therefore always be metaphysics in the world; nay, every one, especially every man of reflexion, will have it, and for want of a recognised standard, will shape it for himself after his own pattern. What has hitherto been called metaphysics, cannot satisfy any critical mind, but to forego it entirely is impossible; therefore a *Critique of Pure Reason* itself must now be attempted or, if one exists, investigated,

and brought to the full test, because there is no other means of supplying this pressing want, which is something more than mere thirst for knowledge.

Ever since I have come to know critique, whenever I finish reading a book of metaphysical contents, which, by the preciseness of its notions, by variety, order, and an easy style, was not only entertaining but also helpful, I cannot help asking, "Has this author indeed advanced metaphysics a single step?" The learned men, whose works have been useful to me in other respects and always contributed to the culture of my mental powers, will, I hope, forgive me for saying, that I have never been able to find either their essays or my own less important ones (though self-love may recommend them to me) to have advanced the science of metaphysics in the least, and why?

Here is the very obvious reason: metaphysics did not then exist as a science, nor can it be gathered piecemeal, but its germ must be fully preformed in the *Critique*. But in order to prevent all misconception, we must remember what has been already said, that by the analytical treatment of our concepts the understanding gains indeed a great deal, but the science (of metaphysics) is thereby not in the least advanced, because these dissections of concepts are nothing but the materials from which the intention is to carpenter our science. Let the concepts of substance and of accident be ever so well dissected and determined, all this is very well as a preparation for some future use. But if we cannot prove, that in all which exists the substance endures, and only the accidents vary, our science is not the least advanced by all our analyses.

Metaphysics has hitherto never been able to prove *a priori* either this proposition, or that of sufficient reason, still less any more complex theorem, such as belongs to psychology or cosmology, or indeed any synthetical proposition. By all its analysing therefore nothing is affected, nothing obtained or forwarded, and the science, after all this bustle and noise, still remains as it was in the days of Aristotle, though far better preparations were made for it than of old, if the clue to synthetical cognitions had only been discovered.

If any one thinks himself offended, he is at liberty to refute my charge by producing a single synthetical proposition belonging to metaphysics, which he would prove dogmatically *a priori*, for until he has actually performed this feat, I shall not grant that he has

truly advanced the science; even should this proposition be sufficiently confirmed by common experience. No demand can be more moderate or more equitable, and in the (inevitably certain) event of its non-performance, no assertion more just, than that hitherto metaphysics has never existed as a science.

But there are two things which, in case the challenge be accepted, I must deprecate: first, trifling about probability and conjecture, which are suited as little to metaphysics, as to geometry; and secondly, a decision by means of the magic wand of common sense, which does not convince every one, but which accommodates itself to personal peculiarities.

For as to the former, nothing can be more absurd, than in metaphysics, a philosophy from pure reason, to think of grounding our judgments upon probability and conjecture. Everything that is to be cognised *a priori*, is thereby announced as apodeictically certain, and must therefore be proved in this way. We might as well think of grounding geometry or arithmetic upon conjectures. As to the doctrine of chances in the latter, it does not contain probable, but perfectly certain, judgments concerning the degree of the probability of certain cases, under given uniform conditions, which, in the sum of all possible cases, infallibly happen according to the rule, though it is not sufficiently determined in respect to every single chance. Conjectures (by means of induction and of analogy) can be suffered in an empirical science of nature only, yet even there the possibility at least of what we assume must be quite certain.

The appeal to common sense is even more absurd, when concept and principles are announced as valid, not in so far as they hold with regard to experience, but even beyond the conditions of experience. For what is common sense? It is normal good sense, so far it judges right. But what is normal good sense? It is the faculty of the knowledge and use of rules *in concreto*, as distinguished from the speculative understanding, which is a faculty of knowing rules *in abstracto*. Common sense can hardly understand the rule, "that every event is determined by means of its cause," and can never comprehend it thus generally. It therefore demands an example from experience, and when it hears that this rule means nothing but what it always thought when a pane was broken or a kitchen-utensil missing, it then understands the principle and grants it. Common sense therefore is only of use so far as it can see its rules

(though they actually are *a priori*) confirmed by experience; consequently to comprehend them *a priori*, or independently of experience, belongs to the speculative understanding, and lies quite beyond the horizon of common sense. But the province of metaphysics is entirely confined to the latter kind of knowledge, and it is certainly a bad index of common sense to appeal to it as a witness, for it cannot here form any opinion whatever, and men look down upon it with contempt until they are in difficulties, and can find in their speculation neither in nor out.

It is a common subterfuge of those false friends of common sense (who occasionally prize it highly, but usually despise it) to say, that there must surely be at all events some propositions which are immediately certain, and of which there is no occasion to give any proof, or even any account at all, because we otherwise could never stop inquiring into the grounds of our judgments. But if we except the principle of contradiction, which is not sufficient to show the truth of synthetical judgments, they can never adduce, in proof of this privilege, anything else indubitable, which they can immediately ascribe to common sense, except mathematical propositions, such as twice two make four, between two points there is but one straight line, etc. But these judgments are radically different from those of metaphysics. For in mathematics I myself can by thinking construct whatever I represent to myself as possible by a concept: I add to the first two the other two, one by one, and myself make the number four, or I draw in thought from one point to another all manner of lines, equal as well as unequal; yet I can draw one only, which is like itself in all its parts. But I cannot, by all my power of thinking, extract from the concept of a thing the concept of something else, whose existence is necessarily connected with the former, but I must call in experience. And though my understanding furnishes me *a priori* (yet only in reference to possible experience) with the concept of such a connexion (i. e., causation), I cannot exhibit it, like the concepts of mathematics, by (*Anschauung*) visualising them, *a priori*, and so show its possibility *a priori*. This concept, together with the principles of its application, always requires, if it shall hold *a priori*—as is requisite in metaphysics—a justification and deduction of its possibility, because we cannot otherwise know how far it holds good, and whether it can be used in experience only or beyond it also.

Therefore in metaphysics, as a speculative science of pure reason, we can never appeal to common sense, but may do so only when we are forced to surrender it, and to renounce all purely speculative cognition, which must always be knowledge, and consequently when we forego metaphysics itself and its instruction, for the sake of adopting a rational faith which alone may be possible for us, and sufficient to our wants, perhaps even more salutary than knowledge itself. For in this case the attitude of the question is quite altered. Metaphysics must be science, not only as a whole, but in all its parts, otherwise it is nothing; because, as a speculation of pure reason, it finds a hold only on general opinions. Beyond its field, however, probability and common sense may be used with advantage and justly, but on quite special principles, of which the importance always depends on the reference to practical life.

This is what I hold myself justified in requiring for the possibility of metaphysics as a science.

FOUNDATIONS OF THE METAPHYSICS OF ETHICS

Of the three traditional divisions of philosophy, Kant says in the Preface to this work, the two material branches, Physics and Ethics (as opposed to the purely formal science Logic), have each an empirical and a rational part. There is therefore a metaphysic of ethics as there is a metaphysic of nature. And as a critique of speculative reason must precede the construction of the latter, so a critique of practical reason is necessary to the former. It is necessary, in other words, to seek out and examine the source in human nature of the "highest principle of morality" upon which all other moral principles will then be seen to depend. Kant describes his procedure in this preliminary treatise as follows:

I have in this work selected my method in such a way that I believe it to be the method most fitting if one wishes to take his road analytically from common knowledge to the determination of its highest principle and back again synthetically from the examination of this principle and its sources to the common knowledge in which its use will be discovered. From this the following division of the work has resulted:

1. *First Section:* Transition from the common moral knowledge of reason to the philosophical.
2. *Second Section:* Transition from popular moral philosophy to the metaphysic of ethics.
3. *Third Section:* Last step from the metaphysic of ethics to the critique of pure practical reason.

[The first of these three sections is included here.]

SEC. I. TRANSITION FROM THE COMMON MORAL KNOWLEDGE
OF REASON TO THE PHILOSOPHICAL³⁷

It is impossible to think of anything anywhere in the world, or even outside it, that can without restriction be considered good, except only a *good will*. Understanding, wit, judgment and whatever else the talents of the mind are called, or courage, resolution, persistence in our undertakings, as attributes of the disposition, are without doubt good and desirable in many respects. But they can also be extremely bad and harmful, if the will which is to make use of these gifts of nature and whose peculiar constitution is therefore called Character, is not good. It is the same with the gifts of fortune. Power, wealth, honor, even health, and all well-being and contentment with one's condition, under the name of happiness, produce confidence and hence even overconfidence, where there is no good will to direct and render generally purposeful the influence of these factors on the spirit and thus the whole principle of action. Not to mention the fact that a rational impartial observer can never take any pleasure in the sight of the well-being, even uninterrupted, of a creature unadorned by any trace of a pure and good will; and so a good will seems to constitute the indispensable condition for even deserving to be happy.

Some attributes are indeed necessary to this good will itself and can greatly lighten its labor, but they have nevertheless no inner unconditioned value. Rather they always presuppose a good will, which restricts the high esteem we rightly hold for them, and prevents their being considered absolutely good. Moderation in feelings and passions, self-control and sober reflection are not only good in many respects, but even seem to constitute a part of the inner value of the person. But they are a long way from being declared good without restriction (however unreservedly they were praised by the ancients). For without the principles of a good will they can be extremely bad; and the cold-bloodedness of a villain not only makes him much more dangerous; but also he inspires much more downright repugnance on our part, than he would have done without that quality.

The good will is good not through what it effects or executes, not through its fitness for attaining any given goal, but only through its

³⁷ Translated from *Grundlegung zur Metaphysik der Sitten, Erster Abschnitt* (*Works*, Vol. IV [Berlin: Royal Prussian Academy of the Sciences, 1903]), pp. 393-405.

willing, that is, in itself. And considered in itself it is incomparably more highly to be esteemed than anything that could ever be accomplished in compliance with any inclination—or if you like the sum of all inclinations. Suppose that, through some special ill-will of fate or through the miserly endowment of a Stepmother Nature, this will should be entirely wanting in means for carrying out its intention; suppose that even with its greatest possible exertion it accomplished nothing, and only the good will (not indeed as a mere wish, but as a process of calling up all the means so far as they are in our power) remained. Even so it would shine like a jewel in its own right, as something that has its full value in itself. Its usefulness or fruitlessness can neither add to nor detract from this value. Usefulness or fruitlessness would be as it were only the setting, to make it more easily handled in ordinary commerce or call attention to itself on the part of those who are not yet sufficiently expert; but not to recommend it to experts or to determine its value.

There is, however, in this idea of the absolute value of the mere will, with no consideration of usefulness in its evaluation, something so odd that, despite all the agreement even of common reason with it, a suspicion must nevertheless arise that perhaps there is, if the truth were known, only high-flown fancy at its root, and that we may falsely understand Nature's intention in making reason ruler of our will. Therefore we must examine this idea from this point of view.

In considering the natural endowment of an organized being, that is of one purposefully adjusted for life, we take it as a principle that no instrument for any purpose is found in it which is not the properest and most fitting for that purpose. Now if in a being which has reason and a will, its preservation, its well-being, in a word its happiness were the real purpose of Nature, she would have hit on a very bad arrangement in making the reason of the creature executor of this her intention. For all the actions, which it must practise with this intention, and all the rules of its behavior would be much more exactly prescribed for it through instinct; and that purpose could be much more surely maintained through this means, than it can ever be through reason. Should reason be granted at all to the favored creature, it would serve him only for meditating on the happy endowment of his nature, for admiring it, rejoicing in it and being thankful to the benevolent cause of it; but

not for submitting his desires to that weak and deceptive guidance and meddling with the intentions of Nature. In a word Nature would have prevented reason from striking out in the direction of practical use and daring with its weak insights to think out for itself a plan of happiness and of the means to achieve it. Nature would not only have taken over the choice of ends, but also of means as well, and with prudent concern have entrusted both entirely to instinct.

As a matter of fact we also find that the more a cultivated reason concerns itself with the intention of enjoying life and getting happiness, the farther the man strays from true contentment. Hence with many people, and in fact with those most practised in the use of reason, there arises (if only they are honest enough to admit it) a certain degree of misology, that is, hatred of reason. For after considering all the advantage they draw, I shall not say from all the arts of common luxury, but even from the learned disciplines (which likewise seem to them, at the end, a luxury of the understanding), they find after all that they have actually brought down more trouble on their heads than they have won happiness. And so instead of despising him, they finally envy the more common stamp of man, who is closer to the guidance of mere natural instinct, and who does not allow his reason much influence on what he does or lets be. And one must admit, so far, that there is nothing peevish about the judgment of those who moderate considerably and even set at less than zero those boastful encomia of the advantages reason is to furnish us with respect to happiness and contentment with life. Nor is such judgment ungrateful toward the kindness of the world's government. On the contrary, one must rather admit that there lies hidden in these judgments the idea of another and far worthier intention for its existence,—for which (and not for happiness) reason is really constituted, and to which therefore, as its highest condition, the private intention of the individual must largely give way.

For reason is not sufficiently qualified to guide the will securely with respect to its objects and the satisfaction of all our needs (which reason in part even multiplies); and to this end a natural instinct implanted in us would have led with much more certainty. But at the same time reason is nevertheless allotted us as a practical faculty, that is, as one which is meant to have influence on the

will. Therefore, as nature has everywhere else gone purposefully to work in the distribution of her talents, the true vocation of reason must be to produce, not a will good as means for some other purpose, but a will that is good in itself; and for that end reason was absolutely necessary. This will, therefore, may not be the only and the whole good, but yet it must be the highest good, and the condition for all remaining goods, even for all longing after happiness. In this case we can very well reconcile it with the wisdom of nature when we perceive that the cultivation of reason, which is indispensable for the former, unconditioned purpose, in many ways limits, in this life at least, and can even set at less than zero the attainment of the second purpose, which is always conditioned, namely of happiness. For reason, which recognizes its highest practical vocation in the establishment of a good will, is only capable, upon the attainment of this goal, of a contentment in accord with its own nature, that is, a contentment arising from the fulfillment of an end again determined only by reason,—united though this be with much violence to the ends of inclination.

In order, however, to develop the concept of a good will estimable in itself and without ulterior purpose, as we find it dwelling in a natural sound understanding and needing not so much to be taught as rather to be merely clarified,—in order to develop this concept, which stands foremost in the evaluation of the whole worth of our actions and constitutes the condition for all else besides, we wish to consider the concept of DUTY, which contains that of a good will, though under certain subjective limitations and difficulties—difficulties which, however, far from hiding it and making it unrecognizable, rather set it off by contrast and let it shine forth even more brightly.

I pass over here all actions which are obviously known to be contrary to duty, even though they may be useful for this or that purpose. For with them there is no question at all as to whether they might have happened from duty, since they go so far as to contradict it. I also set aside those actions which are actually in accord with duty, to which men have no direct inclination, but which they nevertheless practice because they are driven to it by some other inclination. For there one can easily distinguish whether the action according with duty happened from duty or from a selfish purpose. This difference is much more difficult to observe, where the action

is in accord with duty and the subject has in addition a direct inclination to it.³⁸ For example, it is in fact in accord with duty, for the merchant not to overcharge his inexperienced customer; and, where there is much traffic, the wise merchant actually does not do so, but keeps a fixed common price for every one, so that a child can buy from him just as well as any one else. One is therefore served honestly. But that is not nearly enough to make us believe that the merchant has acted thus from duty and from principles of honesty: his advantage demanded it. But that he should also have in addition a direct inclination for his customers, so as to give none of them an advantage in price over another as it were out of love, is here not to be assumed. So the action took place neither from duty, nor from direct inclination, but only with a self-interested intent.

On the other hand, to preserve one's life, is duty, and in addition every one has also a direct inclination so to do. But for that reason the care, and often anxious care, which most men take for preserving their lives, has no inner value, and its maxim³⁹ has no moral import. They protect their lives, to be sure, in accordance with duty, but not from duty. In contrast, when reverses and hopeless grief have entirely removed the taste for life; when the victim of misfortune, strong in soul, more enraged by his fate than faint-hearted or cast down, wishes for death, and yet preserves his life without loving it, not from inclination or fear, but from duty, then his maxim does have moral import.

To be beneficent, where one can, is duty; and there are besides many souls so sympathetically disposed that without any other motive of vanity or self-interest they get an inner satisfaction from spreading joy around them, and feast on the contentment of others, in so far as it is their work. But I insist that in such a case this sort of action, as much in accord with duty, as loveable as it is, has nevertheless no true moral value, but is in the same case as other inclinations, for example the love of honour,—which, if it fortunate-

³⁸ [Of the three types of action mentioned (action contrary to duty, action in accord with duty plus indirect inclination, and action in accord with duty plus direct inclination) the example which follows belongs to the second type. The third is treated in the next paragraphs.—EDITORS.]

³⁹ [The "maxim" of an act is the inner command to will that act which a rational being gives himself. See Kant's note on the term, n. 40 below.—EDITORS.]

ly hits on something that is in fact generally beneficial and consonant with duty, in short honorable, deserves praise and encouragement to be sure, but not esteem. For the maxim lacks moral import, which consists in the execution of such actions not from inclination but from duty. Suppose therefore, the spirit of our philanthropist to be clouded with personal grief, which extinguishes all sympathy with others' fate: he would still have the capacity of benefiting other sufferers, but alien suffering would not touch him, because he is sufficiently busy with his own. And if now, when no inclination any longer provokes him, he should nevertheless tear himself out of this deadly insensitiveness and do the action without any inclination whatsoever, entirely from duty, then and only then does that action have its genuine moral worth. Still more: suppose nature had set in this or that man's heart only very little sympathy, suppose he were (though an honest man) by disposition cold and indifferent toward the sufferings of others,—perhaps because, provided against his own with the special gift of patience and persevering strength, he presupposes or even demands the same thing in every other person. Suppose, in short, that nature really had not fashioned such a man (who would not, indeed, be her worst product) to be a friend to men: would he not despite this find within him a source for setting on himself a much higher value than that of a goodnatured disposition? By all means! only here does the value of that character begin, which is moral and beyond all comparison the highest: with the fact, that he does good not from inclination, but from duty.

To assure one's own happiness, is duty (at least indirectly); for the lack of contentment with one's condition in the press of many cares and amidst unsatisfied needs could easily become a great temptation to violate one's duties. But, without thinking of duty here, all men have of themselves the most powerful and inmost inclination toward happiness, since it is in this very idea that all inclinations are united in one sum. But the prescription for happiness is usually so constituted that it does great violence to some inclinations; and so a man can make for himself no definite and certain concept of the sum of the satisfaction of all of them under the name of happiness. Hence it is not to be wondered at, that a single inclination, determinate with respect to what it promises and the time in which its satisfaction can be obtained, can outweigh a

wavering idea; and that a man with gout, for example, can choose to enjoy what pleases his palate, and suffer what he can, because here at least he has not after his deliberations deprived himself of the enjoyment of the present moment because of expectations, perhaps unfounded, of a happiness said to reside in health. But in this case too, if the general inclination to happiness did not determine his will, if at least health did not have so necessary a place in his deliberation, then here too as in all other cases there is a residue of law, to wit, the law of furthering his happiness, not from inclination, but from duty; and only there does his behavior have its genuine moral worth.

It is doubtless in this way that those scriptural passages are likewise to be understood in which we are commanded to love our neighbors, even our enemies. For love as inclination cannot be commanded; but beneficence from duty, even when no inclination whatsoever impels us to it, or more than that, when natural and unconquerable aversion opposes, is *practical* and not *pathologic* love, which rests in the will and not in the bias of feeling, in principles of action and not of melting sympathy. And that love alone can be commanded.

The second proposition is: An action from duty has its moral value *not in the purpose* which is to be achieved through it, but in the maxim⁴⁰ according to which it is resolved upon. Thus it does not depend on the reality of the object of the action, but only on the *principle* of the act of *willing* in accordance with which the action, abstracted from all objects of desire, has happened. That the intentions which we may have in actions, and their effects as ends and impulses of the will, can bestow upon those actions no unconditioned and moral value, is clear from what has been said above. Where then can this value reside, if it is not to consist in the will in relation to its hoped for effect? It can reside nowhere else but in the *principle of the will*, in abstraction from the ends which can be effected through such action. For the will is as it were upon a crossroads between its principle a priori, which is formal, and its impulse a posteriori, which is material. And since it must be determined by

⁴⁰ A maxim is the subjective principle of the act of willing; the objective principle (that is, that principle which would also serve all rational beings subjectively as a practical principle if reason had complete power over the faculty of desire) is the practical law.

something or other, it must be determined by the formal principle of willing in general, since every material principle has been removed from it.

The third proposition, as a consequence of both the preceding, I should express as follows: *Duty is the necessity of an action out of respect for the law.* For the object as effect of my proposed action I can indeed have an *inclination*, but *never respect*, for this reason: that it is only an effect and not an activity of a will. In the same way I can have no respect for inclination in general, be it mine or some one else's; I can at most sanction it in the former case, in the latter sometimes even love it, that is view it as favorable to my own advantage. Only that which is connected with my will solely as ground, but never as effect, only that which does not serve my inclination, but outweighs it, or at least excludes it entirely from my deliberations when I make a choice, in a word only the mere law in itself, can be an object of respect and therewith a command. But an action from duty must cut off entirely the influence of inclination and with it every object of the will. Therefore there remain nothing for the will, which could determine it, except objectively the *law* and subjectively *pure respect* for this practical law, in a word the maxim which bids me follow such a law though it be with violence to all my inclinations.

The moral value of an action, then, does not reside in the effect which is expected from it, nor in any principle of action which needs to borrow its motivation from this expected effect. For all these effects (comfortable circumstances, or even the furtherance of others' happiness) could also be produced through other causes; and so the will of a rational being would not be needed for that end. But only in such a will can the highest and unconditioned good be found. Nothing else, then, but the *representation of the law* in itself (*which actually occurs only in rational beings*), in so far as that representation, but not the hoped for effect, is the determining ground for the will, can constitute that all-excelling good which we call moral, which is already present in the very person who acts on it, but cannot be expected to arise later from the effect.⁴¹

⁴¹ One might make the objection that I am only seeking to take refuge behind the word respect in a dark feeling, instead of giving clear information on the question through a concept of reason. But even though respect is a feeling, still it is a feeling *received* through no influence, but *self-effected* through a rational concept,

But what kind of law can that be, the representation of which, without consideration of the expected effect must determine the will, in order that it may be called good absolutely and without limitation? Since I have robbed the will of all impulses which could arise in it from following any particular law, there remains nothing but the universal lawfulness of actions in general, which alone must serve the will as principle. That is, I must never conduct myself otherwise than *in such a way, that I can also will that my maxim should become a universal law*. Here now it is mere lawfulness in general (without any basis in a law determined toward certain actions) which serves the will as principle,—and must so serve it, if duty is not to be everywhere an empty delusion and a fantastic concept. With this statement, moreover, ordinary human reason in its practical judgments is entirely in agreement; and it has the principle in question at all times before its eyes.

Take, for example, the question whether I may, when I am pressed, make a promise with the intention not to keep it. Here I distinguish with ease the meaning of the question whether it is prudent, and the question whether it is in accord with duty, to make a false promise. The first case can doubtless occur frequently. To be sure, I see very well that it is not enough to extricate myself through this way of escape from a present embarrassment, but that I must consider seriously whether much greater embarrassment to

and therefore specifically distinct from all feelings of the former kind, which are reducible to inclination or fear. Whatever I recognize immediately as law for me, I recognize with respect, which means merely the consciousness of the *subordination* of my will to a law, without the mediation of other influences on my mind. The immediate determination of the will through law and the consciousness of it is called *respect*, so that respect is regarded as the *effect* of the law on the subject and not as its *cause*. Actually respect is the representation of a value that does violence to my self-love. Therefore it is something which is regarded as an object neither of inclination nor of fear, although it has something analogous to both. The *object* of respect is therefore exclusively the *law*, and further, that law which we impose *upon ourselves* and yet as necessary in itself. As law we are subjected to it, without consulting self-love; as imposed on us by ourselves, it is nevertheless a consequence of our will, and bears in the first respect an analogy with fear, in the second with inclination. All respect for a person is really only respect for the law (of righteousness, etc.) of which that person gives us the example. Because we regard the extension of our talents as a duty, so in a person of talent we set before ourselves, as it were, the *example of a law* (in order through practice to become like him in this respect); and that constitutes our respect. All so-called moral *interest* consists entirely in respect for the law.

me may not arise out of this lie, than that from which I am now setting myself free. For the consequences are with all my supposed slyness not so easily to be foreseen, that a confidence once lost might not become much more disadvantageous to me than all the evil I now think to avoid. So I must consider whether I should not act more prudently if I conducted myself in this case according to a universal maxim and made it my custom to make no promise except with the intention of keeping it. But here I soon realize that such a maxim has for its ground only the troublesome consequences of my act. But it is one thing to be truthful from duty and quite another to be so from concern for disadvantageous consequences. For in the first case the concept of the action in itself already contains a law for me; in the second I must first look about me in other quarters, to find out what effects for me might be connected with it. For if I deviate from the principle of duty, that is certainly evil; but if I prove false to my maxim of prudence, this can sometimes be very advantageous for me, even though it is in fact safer to keep to it. In order however to instruct myself in the briefest and least deceitful way concerning the answer to this problem, as to whether a lying promise is in accord with duty, I ask myself: would I be content to have my maxim (to extricate myself from embarrassment through an untrue promise) in force as a universal law; and would I be able to say to myself: every one may make an untrue promise, if he finds himself in an embarrassing situation, from which he cannot extricate himself in any other way? In this way I soon realize that I can indeed will the lie, but not a universal law which sanctions lying. For according to such a law there would really be no promises at all, since it would be fruitless to represent my will with respect to my future actions to others who would not believe my assertion, or, if they did so hastily, would nevertheless repay me with the same coin. In other words my maxim, as soon as it was made into a universal law, would destroy itself.

Thus for what I have to do, in order that my willing may be morally good, I do not need any far-flung acuteness of mind. Inexperienced in the ways of the world, unable to stand ready for all the circumstances that occur in it, I simply ask myself: can you also will, that your maxim should become a universal law? Where you cannot, that maxim is to be rejected,—and this not for the sake

of a disadvantage resulting from it for you or even for others, but because it cannot fit as a principle into a universal legislation. But for the latter, my reason forces from me immediate respect, concerning which I do not yet see whereon it rests (a point which the philosopher must investigate), but understand at least this much: that it consists in esteem for the value that outweighs all the value of those things praised through inclination; and that the necessity of my actions from *pure* respect for the practical law is what constitutes duty, before which every other motive must give way, because it is the condition of a will good in itself, whose *value* exceeds all things.

Thus in considering the moral knowledge of ordinary human reason, we have arrived at its principle, which such reason does not indeed consider separated in this general form, but yet always actually has before its eyes and uses as the standard for its judgments. It would be easy to show here, how, with this compass in its hand, ordinary human reason knows very well in every given case how to distinguish what is good, evil, in accord with or contrary to duty, if, without teaching it the least thing that's new, we simply call its attention, as Socrates did, to its own principle. And so it would be easy to show that we need no learning and philosophy to teach us what we should do in order to be honest and good, or even wise and virtuous. One might even hazard a guess beforehand, that the knowledge of that which it is up to every man to do, and thus to know, would also be every man's, even the commonest man's business. In this context we cannot observe without astonishment how much in advance practical judgment is over theoretical in the ordinary human understanding. In the latter, when ordinary reason dares to depart from the empirical laws and perceptions of the senses, it gets into nothing but enigmas and self-contradictions, darkness and inconstancy. But it is only in the practical sphere that judgment really begins to show itself to advantage, when the ordinary understanding excludes all sensuous impulses from practical laws. Then it even turns subtle, whether because it would play tricks with its conscience or with other claims in relation to what is to be called right, or because it wishes for its own instruction to determine correctly the value of the actions in question. And what is most important, it can in the latter case hold just as high hopes

of striking true, as ever a philosopher may promise himself; in fact ordinary understanding is almost surer in this than the philosopher himself, since the latter can have no other principle than the former, but can easily obscure his own judgment and make it deviate from the strait path through a host of foreign and irrelevant considerations. Would it not therefore be wiser, in moral matters, to let it rest with the judgment of common reason, and at most to bring in Philosophy only in order to present the system of morals more completely and fully and the rules for its use (but even more the rules for dispute about it) more conveniently; but not in order, with a practical intent, to lead common sense away from its happy simplicity and to bring it through philosophy to a new way of investigation and instruction?

Innocence is all very fine; only it is also most deplorable, that it doesn't keep well and is easily seduced. Therefore even wisdom—which otherwise consists more in doing and letting be than in knowing—needs a discipline, not to learn about it, but to afford its pre-script admission and endurance. Against all the commands of duty, which reason presents to them as so much to be revered, men feel in themselves a heavy counterweight in their needs and inclinations, the whole satisfaction of which they comprehend under the name of happiness. Now, without promising anything to the inclinations, reason issues its commands unceasingly, and as it were with repulsion and disregard of those stormy and yet modest looking claims (which refuse to be cancelled by any command). From this fact arises a *natural dialectic*, that is, a tendency to quibble against those strict laws of duty and their validity, at least to call in doubt their purity and strength and to make them wherever possible more suited to our wishes and inclinations: that is, basically to destroy them and to deprive them of their whole value,—a procedure which even common practical reason at last cannot approve.

Thus common human reason is driven, not by any need for speculation (which never occurs to it as long as it is content with being mere sound reason), but even on practical grounds, to go beyond its circle and to take a step into the field of *practical philosophy*. Its purpose is to get information and clear counsel about the source and right determination of its principle in contrast to the maxims founded on need and inclination. Thus it may emerge from

its embarrassment with regard to opposed claims, and not run into the danger of being deprived of all true moral principles through the ambiguity into which it easily falls. So even in practical common reason, when it is cultivated, there is spun out, just as in the theoretical use of reason, a *dialectic* which makes it necessary to seek help in philosophy. And neither the one nor the other will find rest anywhere except in a complete critique of our reason.

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